# ARIZONA-AMERICAN WATER COMPANY, INC.

## **DOCKET NO. WS-01303A-06-0403**

**DIRECT TESTIMONY** 

OF

WILLIAM A. RIGSBY, CRRA

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

**MARCH 27, 2007** 

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#### **INTRODUCTION**

- Q. Please state your name, occupation, and business address.
  - A. My Name is William A. Rigsby. I am a Public Utilities Analyst V employed by the Residential Utility Consumer Office ("RUCO") located at 1110 W. Washington, Suite 220, Phoenix, Arizona 85007.

Q. Please describe your qualifications in the field of utilities regulation and your educational background.

A. I have been involved with utilities regulation in Arizona since 1994. During that period of time I have worked as a utilities rate analyst for both the Arizona Corporation Commission ("ACC" or "Commission") and for RUCO. I hold a Bachelor of Science degree in the field of finance from Arizona State University and a Master of Business Administration degree, with an emphasis in accounting, from the University of Phoenix. I have been awarded the professional designation, Certified Rate of Return Analyst ("CRRA") by the Society of Utility and Regulatory Financial Analysts ("SURFA"). The CRRA designation is awarded based upon experience and the successful completion of a written examination. Appendix I, which is attached to this testimony, further describes my educational background and also includes a list of the rate cases and regulatory matters that I have been involved with.

- Q. What is the purpose of your testimony?
- A. The purpose of my testimony is to present recommendations that are based on my analysis of Arizona American Water Company's ("Arizona-American" or "Company") application for a permanent rate increase ("Application") for the Company's Anthem/Agua Fria Water and Wastewater Districts ("Anthem/Agua Fria Districts"). Arizona-American filed the Application with the ACC on June 16, 2006. The Company filed a revised application ("Revised Application") on August 4,2006. Arizona-American has chosen the operating period ended December 31, 2005 for the test year in this proceeding.

Q. Briefly describe Arizona-American.

A. In addition to the Anthem/Agua Fria Districts, Arizona-American operates ten other water and wastewater systems in Arizona. The Company is a subsidiary of American Water, which is based in Voorhees, New Jersey. According to information contained on American Water's website<sup>1</sup> American Water provides water and wastewater service to customers in nineteen other states (including California, Hawaii and New Mexico in the western U.S.) and three Canadian provinces. Both American Water and its sister company Thames Water (which serves communities in the

http://www.amwater.com

utility holding company headquartered in Essen, Germany.

Q. Please explain your role in RUCO's analysis of Arizona-American's Application.A. I reviewed Arizona-American's Applications and performed a cost of

United Kingdom), are presently owned by RWE AG<sup>2</sup>, a large multinational

reviewed Arizona-American's Applications and performed a cost of capital analysis to determine a fair rate of return on the Company's invested capital. In addition to my recommended capital structure, my direct testimony will present my recommended costs of common equity and my recommended cost of debt (the Company has no preferred stock). The recommendations contained in this testimony are based on information obtained from Company responses to data requests, the Company's Applications and from market-based research that I conducted during my analysis.

In a press release dated November 4, 2005, RWE AG announced its intentions to divest both of its water business segments, which include Thames Water in the UK and American Water in North America. RWE stated that it had made the decision because it believes it can make better use of its core strengths by concentrating on the converging European electricity and gas markets. RWE also stated that limited synergies between its North American and UK water businesses and its European energy business were a major factor in the decision. RWE AG further stated that its aim is to temporarily increase its dividend payout ratio on completion of each transaction and to reduce debt. In a second press release dated March 24, 2006, RWE stated that American Water would be offered either through an initial public offering ("IPO") or by selling American Water to a group of financial investors. RWE went on to state that "the sales process is expected to be initiated shortly through filings for approval with certain state public utility commissions. The IPO will require filing of a registration statement with the U.S. Securities and Exchange Commission ("SEC"). The transaction will also be subject to the approval of the RWE AG Supervisory Board. The target is to complete the transaction during 2007."

- Q. Is this your first case involving Arizona-American?
- A. No. In addition to the Anthem/Agua Fria Districts<sup>3</sup> I have also testified, as a witness for RUCO, on cost of capital issues in rate case proceedings for the Company's Mohave<sup>4</sup> and Paradise Valley Districts<sup>5</sup>. I also recommended, as a Senior Rate Analyst on the ACC Staff, that the Commission reauthorize a revolving line of credit for the Paradise Valley Water District<sup>6</sup>. Most recently I have filed testimony in dockets that involve arsenic cost recovery for the Paradise Valley District and a request for an increase in hook-up fees, which will fund the construction of a surface water treatment facility, for the Agua Fria District.

Q. Were you also responsible for conducting an analysis on the Company's proposed revenue level, rate base and rate design?

- A. No. RUCO witness Rodney L. Moore handled those aspects of the Company's Application.
- Q. What areas will you address in your testimony?
- 18 A. I will address the cost of capital issues associated with the case.

<sup>3</sup> Docket No. W-01303A-02-0867 et al.

<sup>&</sup>lt;sup>4</sup> Docket No. WS-01303A-06-0014

<sup>&</sup>lt;sup>5</sup> Docket No. W-01303A-05-0405

<sup>&</sup>lt;sup>6</sup> Docket No. W-01335A-00-0327

- Q. Please identify the exhibits that you are sponsoring.
- A. I am sponsoring Schedules WAR-1 through WAR-9.

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### **SUMMARY OF TESTIMONY AND RECOMMENDATIONS**

- Q. Briefly summarize how your cost of capital testimony is organized.
- Α. My cost of capital testimony is organized into seven sections. First, the introduction I have just presented and second, the summary of my testimony that I am about to give. Third, I will present the findings of my cost of equity capital analysis, which utilized both the discounted cash flow ("DCF") method, and the capital asset pricing model ("CAPM"). These are the two methods that RUCO and ACC Staff have consistently used for calculating the cost of equity capital in rate case proceedings in the past, and are the methodologies that the ACC has given the most weight to in setting allowed rates of returns for utilities that operate in the Arizona jurisdiction. In this third section I will also provide a brief overview of the current economic climate that Arizona-American is operating in. Fourth, I will discuss my recommended cost of debt. Fifth, I will compare my recommended capital structure with the Company-proposed capital structure. Sixth, I will explain my weighted cost of capital recommendation and seventh, I will comment on Arizona-American's cost of capital testimony. Schedules WAR-1 through WAR-9 will provide support for my cost of capital analysis.

- Q. Please summarize the recommendations and adjustments that you will address in your testimony.
- A. Based on the results of my analysis of Arizona-American, I am making the following recommendations:

Cost of Equity Capital – I am recommending a 10.27 percent cost of equity capital. This 10.27 percent figure is based on the results that I obtained in my cost of equity analysis, which employed both the DCF and CAPM methodologies and includes an upward adjustment of 50 basis points, which takes the Company's leveraged capital structure into consideration.

<u>Cost of Debt</u> – I am recommending a 5.37 percent cost of debt. This is based on my review of the costs associated with Arizona-American's various long-term notes and payment in lieu of revenue ("PILR") agreements.

<u>Capital Structure</u> – I am recommending that the Company-proposed capital structure, which is comprised of approximately 60 percent debt and 40 percent common equity, be adopted by the Commission.

<u>Cost of Capital</u> – Based on the results of my recommended capital structure, cost of common equity, and debt analyses, I am recommending a 7.33 percent cost of capital for Arizona-American. This figure represents

recommended cost of debt.

Q. Why do you believe that your recommended 7.33 percent cost of capital is an appropriate rate of return for Arizona-American to earn on its invested capital?

the weighted cost of my recommended cost of common equity and my

A. The 7.33 percent cost of capital figure that I have recommended meets the criteria established in the landmark Supreme Court cases of Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia (262 U.S. 679, 1923) and Federal Power Commission v. Hope Natural Gas Company (320 U.S. 391, 1944). Simply stated, these two cases affirmed that a public utility that is efficiently and economically managed is entitled to a return on investment that instills confidence in its financial soundness, allows the utility to attract capital, and also allows the utility to perform its duty to provide service to ratepayers. The rate of return adopted for the utility should also be comparable to a return that investors would expect to receive from investments with similar risk.

The <u>Hope</u> decision allows for the rate of return to cover both the operating expenses and the "capital costs of the business" which includes interest on debt and dividend payment to shareholders. This is predicated on the belief that, in the long run, a company that cannot meet its debt obligations and provide its shareholders with an adequate rate of return will not continue to supply adequate public utility service to ratepayers.

- Q. Do the <u>Bluefield</u> and <u>Hope</u> decisions indicate that a rate of return sufficient to cover all operating and capital costs is guaranteed?
- A. No. Neither case *guarantees* a rate of return on utility investment. What the <u>Bluefield</u> and <u>Hope</u> decisions *do allow*, is for a utility to be provided with the *opportunity* to earn a reasonable rate of return on its investment. That is to say that a utility, such as Arizona-American, is provided with the opportunity to earn an appropriate rate of return if the Company's management exercises good judgment and manages its assets and resources in a manner that is both prudent and economically efficient.

**COST OF EQUITY CAPITAL** 

- Q. What is your recommended cost of equity capital for Arizona-American?
- A. Based on the results of my DCF and CAPM analyses, which ranged from 8.81 percent to 11.40 percent for a sample of publicly traded water and gas providers, I am recommending a 10.27 percent cost of equity capital for Arizona-American. My recommended 10.27 percent figure represents an average of the results of my DCF and CAPM analyses, which utilized a sample of publicly traded water providers and a sample of publicly traded natural gas local distribution companies ("LDC"), plus an additional 50 basis point upward adjustment which takes the Company's debt leveraged capital structure into consideration.

#### **Discounted Cash Flow (DCF) Method**

- Q. Please explain the DCF method that you used to estimate Arizona-American's cost of equity capital.
- A. The DCF method employs a stock valuation model known as the constant growth valuation model, that bears the name of Dr. Myron J. Gordon (i.e. the Gordon model), the professor of finance who was responsible for its development. Simply stated, the DCF model is based on the premise that the current price of a given share of common stock is determined by the present value of all of the future cash flows that will be generated by that share of common stock. The rate that is used to discount these cash flows back to their present value is often referred to as the investor's cost of capital (i.e. the cost at which an investor is willing to forego other investments in favor of the one that he or she has chosen).

Another way of looking at the investor's cost of capital is to consider it from the standpoint of a company that is offering its shares of stock to the investing public. In order to raise capital, through the sale of common stock, a company must provide a required rate of return on its stock that will attract investors to commit funds to that particular investment. In this respect, the terms "cost of capital" and "investor's required return" are one in the same. For common stock, this required return is a function of the dividend that is paid on the stock. The investor's required rate of return can be expressed as the percentage of the dividend that is paid on the

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stock (dividend yield) plus an expected rate of future dividend growth.

This is illustrated in mathematical terms by the following formula:

$$k = (D_1 \div P_0) + q$$

where: k = the required return (cost of equity, equity capitalization rate),

 $D_1 \div P_0$  = the dividend yield of a given share of stock calculated by dividing the expected dividend by the current market price of the given share of stock, and

= the expected rate of future dividend growth.

This formula is the basis for the standard growth valuation model that I used to determine Arizona-American's cost of equity capital. It is similar to one of the models used by the Company.

Α.

Q. In determining the rate of future dividend growth for Arizona-American, what assumptions did you make?

There are two primary assumptions regarding dividend growth that must be made when using the DCF method. First, dividends will grow by a constant rate into perpetuity, and second, the dividend payout ratio will remain at a constant rate. Both of these assumptions are predicated on the traditional DCF model's basic underlying assumption that a company's

earnings, dividends, book value and share growth all increase at the same constant rate of growth into infinity. Given these assumptions, if the dividend payout ratio remains constant, so does the earnings retention ratio (the percentage of earnings that are retained by the company as opposed to being paid out in dividends). This being the case, a company's dividend growth can be measured by multiplying its retention ratio (1 - dividend payout ratio) by its book return on equity. This can be stated as  $q = b \times r$ .

- Q. Would you please provide an example that will illustrate the relationship that earnings, the dividend payout ratio and book value have with dividend growth?
- 13 A. RUCO consultant Stephen Hill illustrated this relationship in a Citizens
  14 Utilities Company 1993 rate case by using a hypothetical utility.<sup>7</sup>

 Table I

	Year 1	Year 2	Year 3	Year 4	Year 5	<u>Growth</u>
Book Value	\$10.00	\$10.40	\$10.82	\$11.25	\$11.70	4.00%
Equity Return	10%	10%	10%	10%	10%	N/A
Earnings/Sh.	\$1.00	\$1.04	\$1.082	\$1.125	\$1.170	4.00%
Payout Ratio	0.60	0.60	0.60	0.60	0.60	N/A
Dividend/Sh	\$0.60	\$0.624	\$0.649	\$0.675	\$0.702	4.00%

<sup>&</sup>lt;sup>7</sup> Citizens Utilities Company, Arizona Gas Division, Docket No. E-1032-93-111, Prepared Testimony, dated December 10, 1993, p. 25.

Table I of Mr. Hill's illustration presents data for a five-year period on his hypothetical utility. In Year 1, the utility had a common equity or book value of \$10.00 per share, an investor-expected equity return of ten percent, and a dividend payout ratio of sixty percent. This results in earnings per share of \$1.00 (\$10.00 book value x 10 percent equity return) and a dividend of \$0.60 (\$1.00 earnings/sh. x 0.60 payout ratio) during Year 1. Because forty percent (1 - 0.60 payout ratio) of the utility's earnings are retained as opposed to being paid out to investors, book value increases to \$10.40 in Year 2 of Mr. Hill's illustration. Table I presents the results of this continuing scenario over the remaining five-year period.

The results displayed in Table I demonstrate that under "steady-state" (i.e. constant) conditions, book value, earnings and dividends all grow at the same constant rate. The table further illustrates that the dividend growth rate, as discussed earlier, is a function of (1) the internally generated funds or earnings that are retained by a company to become new equity, and (2) the return that an investor earns on that new equity. The DCF dividend growth rate, expressed as  $g = b \times r$ , is also referred to as the internal or sustainable growth rate.

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- Q. If earnings and dividends both grow at the same rate as book value, shouldn't that rate be the sole factor in determining the DCF growth rate?
- A. No. Possible changes in the expected rate of return on either common equity or the dividend payout ratio make earnings and dividend growth by themselves unreliable. This can be seen in the continuation of Mr. Hill's illustration on a hypothetical utility.

			Table II			
	Year 1	Year 2	Year 3	Year 4	Year 5	Growth
Book Value	\$10.00	\$10.40	\$10.82	\$11.47	\$12.158	5.00%
Equity Return	10%	10%	15%	15%	15%	10.67%
Earnings/Sh	\$1.00	\$1.04	\$1.623	\$1.720	\$1.824	16.20%
Payout Ratio	0.60	0.60	0.60	0.60	0.60	N/A
Dividend/Sh	\$0.60	\$0.624	\$0.974	\$1.032	\$1.094	16.20%

In the example displayed in Table II, a sustainable growth rate of four percent<sup>8</sup> exists in Year 1 and Year 2 (as in the prior example). In Year 3, Year 4 and Year 5, however, the sustainable growth rate increases to six percent.<sup>9</sup> If the hypothetical utility in Mr. Hill's illustration were expected to earn a fifteen-percent return on common equity on a continuing basis, then a six percent long-term rate of growth would be reasonable. However, the compound growth rates for earnings and dividends,

 $<sup>^{8}</sup>$  [ ( Year 2 Earnings/Sh – Year 1 Earnings/Sh ) ÷ Year 1 Earnings/Sh ] = [ ( \$1.04 - \$1.00 ) ÷ \$1.00 ] = [ \$0.04 ÷ \$1.00 ] =  $\underline{4.00\%}$ 

 $<sup>^{9}</sup>$  [ ( 1 – Payout Ratio ) x Rate of Return ] = [ ( 1 - 0.60 ) x 15.00% ] = 0.40 x 15.00% =  $\underline{6.00\%}$ 

displayed in the last column, are 16.20 percent. If this rate were to be used in the DCF model, the utility's return on common equity would be expected to increase by fifty percent every five years, [(15 percent  $\div$  10 percent) – 1]. This is clearly an unrealistic expectation.

Although it is not illustrated in Mr. Hill's hypothetical example, a change in only the dividend payout ratio will eventually result in a utility paying out more in dividends than it earns. While it is not uncommon for a utility in the real world to have a dividend payout ratio that exceeds one hundred percent on occasion, it would be unrealistic to expect the practice to continue over a sustained long-term period of time.

- Q. Other than the retention of internally generated funds, as illustrated in Mr. Hill's hypothetical example, are there any other sources of new equity capital that can influence an investor's growth expectations for a given company?
- A. Yes, a company can raise new equity capital externally. The best example of external funding would be the sale of new shares of common stock. This would create additional equity for the issuer and is often the case with utilities that are either in the process of acquiring smaller systems or providing service to rapidly growing areas.

A.

Q. How does external equity financing influence the growth expectations held by investors?

Rational investors will put their available funds into investments that will

either meet or exceed their given cost of capital (i.e. the return earned on their investment). In the case of a utility, the book value of a company's stock usually mirrors the equity portion of its rate base (the utility's earning base). Because regulators allow utilities the opportunity to earn a reasonable rate of return on rate base, an investor would take into consideration the effect that a change in book value would have on the rate of return that he or she would expect the utility to earn. If an investor believes that a utility's book value (i.e. the utility's earning base) will increase, then he or she would expect the return on the utility's common stock to increase. If this positive trend in book value continues over an

Q. Please provide an example of how external financing affects a utility's book value of equity.

for sustained long-term growth.

extended period of time, an investor would have a reasonable expectation

A. As I explained earlier, one way that a utility can increase its equity is by selling new shares of common stock on the open market. If these new shares are purchased at prices that are higher than those shares sold previously, the utility's book value per share will increase in value. This would increase both the earnings base of the utility and the earnings

1 expectations of investors. However, if new shares sold at a price below 2 the pre-sale book value per share, the after-sale book value per share 3 declines in value. If this downward trend continues over time, investors 4 might view this as a decline in the utility's sustainable growth rate and will 5 have lower expectations regarding growth. Using this same logic, if a new 6 stock issue sells at a price per share that is the same as the pre-sale book 7 value per share, there would be no impact on either the utility's earnings 8 base or investor expectations.

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- Q. Please explain how the external component of the DCF growth rate is determined.
- A. In his book, The Cost of Capital to a Public Utility, <sup>10</sup> Dr. Gordon (the individual responsible for the development of the DCF or constant growth model) identified a growth rate that includes both expected internal and external financing components. The mathematical expression for Dr. Gordon's growth rate is as follows:

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where:

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g = (br) + (sv)

g = DCF expected growth rate,

b = the earnings retention ratio,

the return on common equity,

s = the fraction of new common stock sold that

<sup>&</sup>lt;sup>10</sup> Gordon, M.J., <u>The Cost of Capital to a Public Utility</u>, East Lansing, MI: Michigan State University, 1974, pp. 30-33.

1					accrues to a current shareholder, and	
2			٧	=	funds raised from the sale of stock as a fraction	
3					of existing equity.	
4		and	V	=	1 - [ ( BV ) ÷ ( MP ) ]	
5		where:	BV	=	book value per share of common stock, and	
6			MP	=	the market price per share of common stock.	
7						
8	Q.	Did you include the effect of external equity financing on long-term growth				
9		rate expectations in your analysis of expected dividend growth for the DCF				
10		model?				
11	A.	Yes. The external growth rate estimate (sv) is displayed on Page 1 of				
12		Schedule WAR-4, where it is added to the internal growth rate estimate				
13		(br) to arrive at a final sustainable growth rate estimate.				
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15	Q.	Please explain why your calculation of external growth on page 2 of				
16		Schedule WAR-4, is the current market-to-book ratio averaged with 1.0 in				
17		the equation	n [(M ÷	B) + 1]	÷ 2.	
18	A.	The market price of a utility's common stock will tend to move toward book				
19		value, or a market-to-book ratio of 1.0, if regulators allow a rate of return				
20		that is equal to the cost of capital (one of the desired effects of regulation).				
21		As a result of this situation, I used [(M $\div$ B) + 1] $\div$ 2 as opposed to the				
22		current market-to-book ratio by itself to represent investor's expectations				
23		that, in the f	uture, a	a given	utility will achieve a market-to-book ratio of 1.0.	

- Q. Has the Commission ever adopted a cost of capital estimate that included this assumption?
- A. Yes. In the most recent Southwest Gas Corporation rate case<sup>11</sup>, the Commission adopted the recommendations of ACC Staff's cost of capital witness, Stephen Hill, who I noted earlier in my testimony. In that case, Mr. Hill used the same methods that I have used in arriving at the inputs for the DCF model. His final recommendation for Southwest Gas Corporation was largely based on the results of his DCF analysis, which incorporated the same valid market-to-book ratio assumption that I have used consistently in the DCF model as a cost of capital witness for RUCO.
- Q. How did you develop your dividend growth rate estimate?
- A. I analyzed data on two separate proxy groups. A water company proxy group comprised of four publicly traded water companies and a natural gas proxy group consisting of ten natural gas local distribution companies ("LDC") which have similar operating characteristics to water providers.
- Q. Why did you use a proxy group methodology as opposed to a direct analysis of Arizona-American?
- A. One of the problems in performing this type of analysis is that the utility applying for a rate increase is not always a publicly traded company, as is the case with Arizona-American itself. Although shares of Arizona-

<sup>&</sup>lt;sup>11</sup> Decision No. 68487, Dated February 23, 2006 (Docket No. G-01551A-04-0876)

American's holding company, RWE AG of Germany, are traded in the U.S. in the form of American depository receipts or ADR's (ticker symbol RWEOY in the case of RWE AG), there is no financial data available on dividends paid on *publicly held* shares of American Water, Arizona-American or the Company's Anthem/Agua Fria Districts water and wastewater operations. Consequently it was necessary to create a proxy by analyzing publicly traded water companies and LDC's with similar risk characteristics.

Q. Are there any other advantages to the use of a proxy?

A. Yes. As I noted earlier, the U.S. Supreme Court ruled in the <u>Hope</u> decision that a utility is entitled to earn a rate of return that is commensurate with the returns on investments of other firms with comparable risk. The proxy technique that I have used derives that rate of return. One other advantage to using a sample of companies is that it reduces the possible impact that any undetected biases, anomalies, or measurement errors may have on the DCF growth estimate.

- Q. Didn't you just state that Arizona-American is seeking rates for both its water and wastewater operations in the Company's Anthem/Agua Fria Districts?
- 22 A. Yes, I did.

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Docket No. WS-01303A-06-0403 1 Q. Isn't it also true that in determining your dividend growth rate estimates, 2 both you and the Company's witness analyzed the data on publicly traded 3 water utilities and LDC's? 4 Α. Yes, it is. 5 6 Q. Why did you and the Company's cost of equity witness analyze only 7 publicly traded water utilities and LDC's as opposed to firms that provide 8 wastewater service? 9 A. The use of water utilities and LDC's was necessitated by the fact that 10 there is a lack of financial and market information available on stand-alone 11 wastewater utilities. This in itself is not a problem, given the fact that both 12 water and wastewater utilities share similar risk characteristics.

Q. What criteria did you use in selecting the companies that make up your water company proxy for Arizona-American?

and are also subject to strict federal and state regulations.

types of utilities provide a basic service for which there are no substitutes

A. Three of the water companies used in the proxy are publicly traded on the New York Stock Exchange ("NYSE"), and one of them, Southwest Water Company is traded over the counter through the National Association of Securities Dealers Automated Quotation System ("NASDAQ"). All four water companies are followed by <a href="The Value Line">The Value Line</a> Investment Survey ("Value Line") and are the same companies that comprise Value Line's

large capitalization Water Utility Industry segment of the U.S. economy (Attachment A contains Value Line's January 26, 2007 update of the water utility industry and evaluations of the four water companies used in my proxy).

Q. What companies comprise your water company proxy group?

A. My water company proxy group includes American States Water Company (stock ticker symbol "AWR"), Aqua America, Inc. ("WTR"), formerly known as Philadelphia Suburban Corporation, California Water Service Group ("CWT") and Southwest Water Company ("SWWC"). Each of these water companies face the same types of risk that Arizona-American faces. For the sake of brevity, I will refer to each of these companies by their appropriate stock ticker symbols henceforth.

Q. Briefly describe the areas served by the companies in your water company sample proxy.

A. In addition to providing water service to residents of Fountain Hills, Arizona, through its wholly owned subsidiary Chaparral City Water Company, AWR serves communities located in Los Angeles, Orange and San Bernardino counties in California. CWT provides service to customers in seventy-five communities in California, New Mexico and Washington. CWT's principal service areas are located in the San Francisco Bay area, the Sacramento, Salinas and San Joaquin Valleys

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and parts of Los Angeles. SWWC owns and manages regulated systems in California, New Mexico, Oklahoma and Texas. WTR is a holding company for a large number of water and wastewater utilities operating in nine different states including Pennsylvania, Ohio, New Jersey, Illinois, Maine, North Carolina, Texas, Florida and Kentucky.

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Q. Are these the same water companies that Arizona-American used in its application?

Arizona-American's cost of equity witness, Dr. Bente Villadsen, used the

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same four water companies included in my proxy. In addition to these four companies, Dr. Villadsen also used two other water companies in her DCF analysis<sup>12</sup> and another two additional water companies in her risk positioning (i.e. CAPM) analysis, <sup>13</sup> which are included in Value Line's

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Q. Why did you exclude the water companies that are followed in Value Line's Small and Mid Cap Edition?

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A. Value Line does not provide the same type of forward-looking information (i.e. long-term estimates on return on common equity and share growth) on small and mid-cap companies that it provides on the four water

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Small and Mid Cap Edition.

<sup>&</sup>lt;sup>12</sup> Middlesex Water Company and York Water Co.

<sup>&</sup>lt;sup>13</sup> Connecticut Water Service, Inc. and SJW Corp.

1 companies that I used in my proxy. Consequently, these water companies 2 are not as suitable as the ones that I have used in my analysis. 3 4 Q. What criteria did you use in selecting the natural gas LDC's included in 5 your proxy for Arizona-American? 6 Α. As are the water companies that I just described, each of the natural gas 7 LDC's used in the proxy are publicly traded on a major stock exchange (all 8 ten trade on the NYSE) and are followed by Value Line. Each of the ten 9 LDC's are tracked in Value Line's natural gas (distribution) industry 10 segment. All of the companies in the proxy are engaged in the provision 11 of regulated natural gas distribution services. Attachment B of my 12 testimony contains Value Line's most recent evaluation of the natural gas 13 proxy group that I used for my cost of common equity analysis.

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- Q. What companies are included your natural gas proxy?
- A. The ten natural gas LDC's included in my proxy (and their NYSE ticker symbols) are AGL Resources, Inc. ("ATG"), Atmos Energy Corp. ("ATO"), Laclede Group, Inc. ("LG"), New Jersey Resources Corporation ("NJR"), Nicor, Inc. ("GAS"), Northwest Natural Gas Co. ("NWN"), Piedmont Natural Gas Company ("PNY"), South Jersey Industries, Inc. ("SJI") Southwest Gas Corporation ("SWX"), which is the dominant natural gas provider in Arizona, and WGL Holdings, Inc. ("WGL"). These are the

same ten LDC's that I analyzed recently in the UNS Gas, Inc. proceeding.<sup>14</sup>

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Q. Briefly describe the regions of the U.S. served by the ten natural gas LDC's that make up your sample proxy.

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Middle Atlantic region (i.e. NJI which serves portions of northern New Jersey, SJI which serves southern New Jersey and WGL which serves the

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Washington D.C. metro area), the Southeast and South Central portions of the U.S. (i.e. ATG which serves Virginia, southern Tennessee and the

The ten LDC's listed above provide natural gas service to customers in the

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Atlanta, Georgia area and PNY which serves customers in North Carolina,

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South Carolina and Tennessee), the South, deep South and Midwest (i.e. ATO which serves customers in Kentucky, Mississippi, Louisiana, Texas,

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Colorado and Kansas, GAS which provides service to northern and

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western Illinois, and LG which serves the St. Louis area), and the Pacific

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Northwest (i.e. NWN which serves Washington state and Oregon).

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Portions of Arizona, Nevada and California are served by SWX.

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Q. Did the Company's witness also perform a similar analysis using natural gas LDC's?

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A. Yes, she did.

<sup>&</sup>lt;sup>14</sup> Docket No. G-04204A-06-0463

- Q. Does your sample of LDC's include all of the same companies that Dr. Villaden included in her sample?
  - A. No. My sample is larger than Dr. Villadsen's and includes five of the seven LDC's that she included in her sample. Dr. Villadsen included Cascade Natural Gas Corporation ('CGC"), which presently serves customers in Oregon and Washington State and Peoples Energy Corporation ("PGL"), which provides service to the city of Chicago and its suburbs.
  - Q. Why did you exclude CGC and PGL from your sample?
- A. On July 8, 2006, MDU Resources Group, Inc. (NYSE symbol MDU) entered into a definitive merger agreement to acquire CGC. Because the value of CGC's stock is now being driven by MDU's acquisition offering price, it is no longer suitable for my sample and was therefore excluded. In regard to PGL, a definitive merger agreement was reached between PGL and WPS Resources and was unanimously approved by the boards of directors of both firms after an announcement on the merger was made during July of 2006. As is the case with CGC, the merger with MDU makes CGC unsuitable for my sample.

- Q. Please explain your DCF growth rate calculations for the sample
   companies used in your proxy.
  - A. Schedule WAR-5 provides retention ratios, returns on book equity, internal growth rates, book values per share, numbers of shares outstanding, and the compounded share growth for each of the utilities included in the sample for the historical observation period 2001 to 2005 for both the water and LDC industries. Schedule WAR-5 also includes Value Line's projected 2006, 2007 and 2008-10 values for the retention ratio, equity return, book value per share growth rate, and number of shares outstanding for both the water utilities and the LDC's.
  - Q. Please describe how you used the information displayed in Schedule WAR-5 to estimate each comparable utility's dividend growth rate.
  - A. In explaining my analysis, I will use American States Water Company, (NYSE symbol AWR) as an example. The first dividend growth component that I evaluated was the internal growth rate. I used the "b x r" formula (described on pages 12 and 13) to multiply AWR's earned return on common equity by its earnings retention ratio for each year in the 2001 to 2005 observation period to derive the utility's annual internal growth rates. I used the mean average of this five-year period as a benchmark against which I compared the projected growth rate trends provided by Value Line. Because an investor is more likely to be influenced by recent growth trends, as opposed to historical averages, the five-year mean

noted earlier was used only as a benchmark figure. As shown on Schedule WAR-5, Page 1, AWR had sustainable internal growth that averaged 2.66 percent over the course of the 2001 to 2005 observation period. This reflects a downward trend that occurred during the 2002 - 2003 period. AWR rebounded from negative growth of 0.72% in 2003 to 1.01% in 2004. Value Line is predicting an increase to 2.68% for 2006 with higher projected increases ranging from 3.17% in 2007 to 4.84% during the 2009-11 time frame. After weighing Value Line's earnings and dividend projections, I have retained my previous estimate of a 5.00% rate of growth, which I believe is reasonable for AWR.

Q. Please continue with the external growth rate component portion of your analysis.

A.

Schedule WAR-5 demonstrates that the pattern of share's outstanding increased from 15.12 million to 16.80 million during the 2001 to 2005 time frame. Despite this share growth of 2.67 percent during the observation period, Value Line is predicting that this level will increase 17.50 million in 2006 to 20.50 million by the end of 2011. Based on this data, I believe that a 4.00% growth in shares is not unreasonable for AWR. My final dividend growth rate estimate for AWR is 7.66 percent (5.00 percent internal + 2.66 percent external) and is shown on Page 1 of Schedule WAR-4.

1 Q. What is your average dividend growth rate estimate using the DCF model 2 for the sample water utilities? 3 A. Based on the DCF model, my average dividend growth rate estimate is 4 6.52 percent as displayed on page 1 of Schedule WAR-4. 5 6 Q. Did you use the same approach to determine an average dividend growth 7 rate for the proxy comprised of natural gas LDC's? 8 Α. Yes. 9 10 Q. What is your average dividend growth rate estimate using the DCF model 11 for the sample natural gas utilities? 12 Α. Based on the DCF model, my average dividend growth rate estimate is 13 5.56 percent, which is also displayed on page 1 of Schedule WAR-4. 14 15 Q. How does your average dividend growth rate estimates on water 16 companies compare to the growth rate data published by Value Line and 17 other analysts? 18 Α. Schedule WAR-6 compares my sustainable growth estimates with the 19 five-year projections of both Zacks (Attachment C) and Value Line. In the 20 case of the water companies, my 6.52 percent estimate is 27 basis points 21 lower than the projection of analysts at Value Line (which is an average of 22 EPS, DPS and BVPS), and 288 basis points lower than the consensus 23 opinions published by Zacks Investment Research, Inc. ("Zacks").

6.52 percent estimate is 88 basis points higher than the Value Line 5-year compound historical average also displayed in Schedule WAR-6. This indicates that investors are expecting increased performance from water utilities in the future. On balance, I would say my 6.52 percent estimate is a good representation of the growth projections that are available to the investing public.

- Q. How do your average dividend growth rate estimates on natural gas LDC's compare to the growth rate data published by Value Line and other analysts?
- A. In regard to the natural gas LDC's, my 5.56 percent estimate is 73 basis points higher than the consensus projections published by Zacks, and 164 basis points higher than Value Line's projected estimates. As can also be seen on Schedule WAR-6, the 5.56 percent estimate that I have calculated is 73 basis points higher than the 4.83 percent average of the 5-year historic EPS, DPS and BVPS means of Value Line and 176 basis points lower than the 7.32 percent five-year historical average of Value Line data (on EPS, DPS and BVPS). In fact, my 5.56 percent estimate is 116 basis points higher than the combined Value Line and Zacks averages. As with water companies, this indicates that investors are expecting increased performance from natural gas distribution companies in the future. In the case of the LDC's I would say that my 5.56 percent estimate, which is higher than Zack's projections and higher than Value

Line's forecasts, is a fair representation of the growth projections presented by securities analysts at this point in time.

- Q. How did you calculate the dividend yields displayed in Schedule WAR-3?
- A. For both the water companies and the natural gas LDC's I used the estimated annual dividends, for the next twelve-month period, that appeared in Value Line's January 26, 2007 Ratings and Reports water services industry update and Value Line's March 16, 2007 Ratings and Reports natural gas (Distribution) update. I then divided those figures by the eight-week average price per share of the appropriate utility's common stock. The eight-week average price is based on the daily closing stock prices for each of the companies in my proxies for the period January 26, 2007 to March 9, 2007.
- Q. Based on the results of your DCF analysis, what is your cost of equity capital estimate for the water and natural gas utilities included in your sample?
- A. As shown in Schedule WAR-2, the cost of equity capital derived from my DCF analysis is 8.81 percent for the water utilities and 9.18 percent for the natural gas LDC's.

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## **Capital Asset Pricing Model (CAPM) Method**

- Q. Please explain the theory behind the capital asset pricing model ("CAPM") and why you decided to use it as an equity capital valuation method in this proceeding.
- A. CAPM is a mathematical tool that was developed during the early 1960's by William F. Sharpe<sup>15</sup>, the Timken Professor Emeritus of Finance at Stanford University, who shared the 1990 Nobel Prize in Economics for research that eventually resulted in the CAPM model. CAPM is used to analyze the relationships between rates of return on various assets and risk as measured by beta. 16 In this regard, CAPM can help an investor to determine how much risk is associated with a given investment so that he or she can decide if that investment meets their individual preferences. Finance theory has always held that as the risk associated with a given investment increases, so should the expected rate of return on that investment and vice versa. According to CAPM theory, risk can be classified into two specific forms: nonsystematic or diversifiable risk, and systematic or non-diversifiable risk. While nonsystematic risk can be virtually eliminated through diversification (i.e. by including stocks of various companies in various industries in a portfolio of securities),

<sup>&</sup>lt;sup>15</sup> William F. Sharpe, "A Simplified Model of Portfolio Analysis," <u>Management Science</u>, Vol. 9, No. 2 (January 1963), pp. 277-93.

<sup>&</sup>lt;sup>16</sup> Beta is defined as an index of volatility, or risk, in the return of an asset relative to the return of a market portfolio of assets. It is a measure of systematic or non-diversifiable risk. The returns on a stock with a beta of 1.0 will mirror the returns of the overall stock market. The returns on stocks with betas greater than 1.0 are more volatile or riskier than those of the overall stock market; and if a stock's beta is less than 1.0, its returns are less volatile or riskier than the overall stock market.

systematic risk, on the other hand, cannot be eliminated by diversification. Thus, systematic risk is the only risk of importance to investors. Simply stated, the underlying theory behind CAPM states that the expected return on a given investment is the sum of a risk-free rate of return plus a market risk premium that is proportional to the systematic (non-diversifiable risk) associated with that investment. In mathematical terms, the formula is as follows:

$$k = r_f + [ \beta (r_m - r_f) ]$$

where: k = cost of capital of a given security,

r<sub>f</sub> = risk-free rate of return,

ß = beta coefficient, a statistical measurement of a security's systematic risk,

r<sub>m</sub> = average market return (e.g. S&P 500), and

 $r_m - r_f = market risk premium.$ 

Q. What security did you use for a risk-free rate of return in your CAPM analysis?

A. I used a six-week average on a 91-day Treasury Bill ("T-Bill") rate. <sup>17</sup> This resulted in a risk-free ( $r_f$ ) rate of return of 5.14 percent.

<sup>&</sup>lt;sup>17</sup> A six-week average was computed for the current rate using 91-day T-Bill quotes listed in Value Line's Selection and Opinion newsletter from February 2, 2007 to March 9, 2007.

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Q. Why did you use the short-term T-Bill rate as opposed to the yield on an intermediate 5-year Treasury note or a long-term 30-year Treasury bond?

Because a 91-day T-Bill presents the lowest possible total risk to an investor. As citizens and investors, we would like to believe that U.S. Treasury securities (which are backed by the full faith and credit of the United States Government) pose no threat of default no matter what their maturity dates are. However, a comparison of various Treasury instruments will reveal that those with longer maturity dates do have slightly higher yields. Treasury yields are comprised of two separate components, 18 a true rate of interest (believed to be approximately 2.00) percent) and an inflationary expectation. When the true rate of interest is subtracted from the total treasury yield, all that remains is the inflationary expectation. Because increased inflation represents a potential capital loss, or risk, to investors, a higher inflationary expectation by itself represents a degree of risk to an investor. Another way of looking at this is from an opportunity cost standpoint. When an investor locks up funds in long-term T-Bonds, compensation must be provided for future investment opportunities foregone. This is often described as maturity or interest rate risk and it can affect an investor adversely if market rates increase before the instrument matures (a rise in interest rates would decrease the value of the debt instrument). As discussed earlier in the DCF portion of my

<sup>&</sup>lt;sup>18</sup> As a general rule of thumb, there are three components that make up a given interest rate or rate of return on a security: the true rate of interest, an inflationary expectation, and a risk premium. The approximate risk premium of a given security can be determined by simply subtracting a 91-day T-Bill rate from the yield on the security.

testimony, this compensation translates into higher rates of returns to the investor. Since a 91-day T-Bill presents the lowest possible total risk to an investor, it more closely meets the definition of a risk-free rate of return and is the more appropriate instrument to use in a CAPM analysis.

- Q. How did you calculate the market risk premium used in your CAPM analysis?
- A. I used both a geometric and an arithmetic mean of the historical returns on the S&P 500 index from 1926 to 2005 as the proxy for the market rate of return (r<sub>m</sub>). The risk premium (r<sub>m</sub> - r<sub>f</sub>) that results by using the geometric mean calculation for  $r_m$  is equal to 5.26 percent (10.40% - 5.14% = <u>5.26%</u>). The risk premium that results by using the arithmetic mean calculation for  $r_m$  is 7.16 percent (12.30% - 5.14% = 7.16%).

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Q. How did you select the beta coefficients that were used in your CAPM analysis?

Α. The beta coefficients (B), for the individual utilities used in both my proxies, were calculated by Value Line and were current as of January 26, 2007 for the water companies and March 16, 2007 for the natural gas LDC's. Value Line calculates its betas by using a regression analysis between weekly percentage changes in the market price of the security being analyzed and weekly percentage changes in the NYSE Composite Index over a five-year period. The betas are then adjusted by Value Line

for their long-term tendency to converge toward 1.00. The beta coefficients for the service providers included in my water company sample ranged from 0.80 to 0.90 with an average beta of 0.88. The beta coefficients for the LDC's included in my natural gas sample ranged from 0.70 to 1.30 with an average beta of 0.87.

- Q. What are the results of your CAPM analysis?
- A. As shown on pages 1 and 2 of Schedule WAR-7, my CAPM calculation using a geometric mean for r<sub>m</sub> results in an average expected return of 9.74 percent for the water companies and 9.69 percent for the natural gas LDC's. My calculation using an arithmetic mean results in an average expected return of 11.40 percent for the water companies and 11.33 percent for the natural gas LDC's.

- Q. Please summarize the results derived under each of the methodologies presented in your testimony.
- A. The following is a summary of the cost of equity capital derived under each methodology used:

20	METHOD	<u>RESULTS</u>
21	DCF (Water Sample)	8.81%
22	DCF (Natural Gas Sample)	9.18%
23	CAPM (Water Sample)	9.74% - 11.40%
24	CAPM (Natural Gas)	9.69% - 11.33%

Based on these results, my best estimate of an appropriate range for a cost of common equity for Arizona-American is 8.81 percent to 11.40 percent. My final recommendation for Arizona-American is 10.27 percent.

- Q How did you arrive at your recommended 10.27 percent cost of common equity?
- Α. My recommended 10.27 percent cost of common equity is the average of my DCF and CAPM results, plus an additional 50 basis points for the increased financial risk faced by Arizona-American as a result of the Company's debt heavy capital structure. The calculation can be seen on Page 3 of Schedule WAR-1.
- Q. Why have you made a 50 basis point upward adjustment to the results of your DCF analysis?

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The 50 basis point adjustment takes into consideration the higher level of debt in the Company's capital structure. My recommended capital structure for Arizona-American is comprised of 40 percent common equity capital and 60 percent debt. This capital structure has a larger percentage of debt than the capital structures of the four water companies and the ten LDC's that I included in my DCF and CAPM proxies. As can be seen in Schedule WAR-9, the utilities included in my samples had capital structures of approximately 50 percent common equity and 50 percent debt, for water providers, and roughly 49 percent common equity and 51

percent debt for natural gas LDC's. Because Arizona-American's capital structure has a higher percentage of debt, the Company faces a higher level of financial risk (i.e. the risk of not being able to meet debt service obligations) than the companies in my proxies. For this reason a higher cost of equity is warranted and I have decided to make such an adjustment. In this case, the 10.27 percent return on common equity that I am recommending is higher than the 9.77 percent average of the results obtained from my DCF and CAPM models.

- Q. How does your recommended cost of equity capital compare with the cost of equity capital proposed by the Company?
- A. The 11.75 percent cost of equity capital proposed by the Company is 148 basis points higher than the 10.27 percent cost of equity capital that I am recommending.

#### **Current Economic Environment**

- Q. Please explain why it is necessary to consider the current economic environment when performing a cost of equity capital analysis for a regulated utility.
- A. Consideration of the economic environment is necessary because trends in interest rates, present and projected levels of inflation, and the overall state of the U.S. economy determine the rates of return that investors earn on their invested funds. Each of these factors represent potential risks

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that must be weighed when estimating the cost of equity capital for a regulated utility and are, most often, the same factors considered by individuals who are investing in non-regulated entities also.

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Q. Please discuss your analysis of the current economic environment.

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A. My analysis includes a brief review of the economic events that have occurred since 1990. Schedule WAR-8 displays various economic indicators and other data that I will refer to during this portion of my testimony.

In 1991, as measured by the most recently revised annual change in gross domestic product ("GDP"), the U.S. economy experienced a rate of growth of negative 0.20 percent. This decline in GDP marked the beginning of a mild recession that ended sometime before the end of the first half of 1992. Reacting to this situation, the Federal Reserve Board ("Federal Reserve" or "Fed"), then chaired by noted economist Alan Greenspan, lowered its benchmark federal funds rate<sup>19</sup> in an effort to further loosen monetary constraints - an action that resulted in lower interest rates.

During this same period, the nation's major money center banks followed the Federal Reserve's lead and began lowering their interest rates as well.

<sup>&</sup>lt;sup>19</sup> The interest rate charged by banks with excess reserves at a Federal Reserve district bank to banks needing overnight loans to meet reserve requirements. The federal funds rate is the most sensitive indicator of the direction of interest rates, since it is set daily by the market, unlike the prime rate and the discount rate, which are periodically changed by banks and by the Federal Reserve Board, respectively.

By the end of the fourth quarter of 1993, the prime rate (the rate charged by banks to their best customers) had dropped to 6.00 percent from a 1990 level of 10.01 percent. In addition, the Federal Reserve's discount rate on loans to its member banks had fallen to 3.00 percent and short-term interest rates had declined to levels that had not been seen since 1972.

Although GDP increased in 1992 and 1993, the Federal Reserve took steps to increase interest rates beginning in February of 1994, in order to keep inflation under control. By the end of 1995, the Federal discount rate had risen to 5.21 percent. Once again, the banking community followed the Federal Reserve's moves. The Fed's strategy, during this period, was to engineer a "soft landing." That is to say that the Federal Reserve wanted to foster a situation in which economic growth would be stabilized without incurring either a prolonged recession or runaway inflation.

Q. Did the Federal Reserve achieve its goals during this period?

A. Yes. The Fed's strategy of decreasing interest rates to stimulate the economy worked. The annual change in GDP began an upward trend in 1992. A change of 4.50 percent and 4.20 percent were recorded at the end of 1997 and 1998 respectively. Based on daily reports that were presented in the mainstream print and broadcast media during most of 1999, there appeared to be little doubt among both economists and the public at large that the U.S. was experiencing a period of robust economic

growth highlighted by low rates of unemployment and inflation. Investors, who believed that technology stocks and Internet company start-ups (with little or no history of earnings) had high growth potential, purchased these types of issues with enthusiasm. These types of investors, who exhibited what former Chairman Greenspan described as "irrational exuberance," pushed stock prices and market indexes to all time highs from 1997 to 2000.

A.

Q. What has been the state of the economy since 2001?

The U.S. economy entered into a recession near the end of the first quarter of 2001. The bullish trend, which had characterized the last half of the 1990's, had already run its course sometime during the third quarter of 2000. Economic data released since the beginning of 2001 had already been disappointing during the months preceding the September 11, 2001 terrorist attacks on the World Trade Center and the Pentagon. Slower growth figures, rising layoffs in the high technology manufacturing sector, and falling equity prices (due to lower earnings expectations) prompted the Fed to begin cutting interest rates as it had done in the early 1990's. The now infamous terrorist attacks on New York City and Washington D.C. marked a defining point in this economic slump and prompted the Federal Reserve to continue its rate cutting actions through December 2001. Prior to the 9/11 attacks, commentators, reporting in both the mainstream financial press and various economic publications including

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Value Line, believed that the Federal Reserve was cutting rates in the hope of avoiding the recession that the U.S. now appears to have recovered from.

Despite several intervals during 2002 and 2003 in which the Federal Open Market Committee ("FOMC") decided not to change interest rates, moves which indicated that the worst may be over and that the current recession might have bottomed out during the last guarter of 2001, a lackluster economy persisted. The continuing economic malaise and even fears of possible deflation prompted the FOMC to make a thirteenth rate cut on June 25, 2003. The guarter point cut reduced the federal funds rate to 1.00 percent, the lowest level in 45 years.

Even though some signs of economic strength, that were mainly attributed to consumer spending, began to crop up during the latter part of 2002 and into 2003, Chairman Greenspan appeared to be concerned with sharp declines in capital spending in the business sector.

During the latter part of 2003, the FOMC went on record as saying that it intended to leave interest rates low "for a considerable period." After its two-day meeting that ended on January 28, 2004, the FOMC announced "that with inflation 'quite low' and plenty of excess capacity in the economy, policy-makers 'can be patient in removing its policy accommodation.20"

<sup>&</sup>lt;sup>20</sup> Wolk, Martin, "Fed leaves short-term rates unchanged," MSNBC, January 28, 2004.

Α.

- Q. What actions has the Federal Reserve taken in terms of interest rates since the beginning of 2001?
  - As noted earlier, from January 2001 to June 2003 the Federal Reserve cut interest rates a total of thirteen times. During this period, the federal funds rate fell from 6.50 percent to 1.00 percent. The FOMC reversed this trend on June 29, 2004 and raised the federal funds rate 25 basis points to 1.25 percent. From June 29, 2004 to January 31, 2006, the FOMC raised the federal funds rate thirteen more times to a level of 4.50 percent.

The FOMC's January 31, 2006 meeting marked the final appearance of Alan Greenspan, who had presided over the rate setting body for a total of eighteen years. On that same day, Greenspan's successor, Ben Bernanke, the former chairman of the President's Council of Economic Advisers and a former Fed governor under Greenspan from 2002 to 2005, was confirmed by the U.S. Senate to be the new Federal Reserve chief.

As expected by Fed watchers, Chairman Bernanke picked up where his predecessor left off and increased the federal funds rate by 25 basis points during each of the next three FOMC meetings for a total of seventeen consecutive rate increases since June 2004, and raising the federal funds rate to its current level of 5.25 percent. The Fed's rate increase campaign finally came to a halt at the FOMC meeting held on August 8, 2006, when the FOMC decided not to raise rates.

- Q. What has been the reaction in the financial community to the Fed's decision not to raise interest rates?
- A. As in the past, banks followed the Fed's lead once again and held the prime rate to a level of 8.25 percent, or 300 basis points higher than the existing federal funds rate of 5.25 percent, where it has stood since June 29, 2006.

Q. How have analysts viewed the Fed's actions over the last five years?

A. According to an article that appeared in the December 2, 2004 edition of <a href="The Wall Street Journal">The Wall Street Journal</a>, the FOMC's decision to begin raising rates two years ago was viewed as a move to increase rates from emergency lows in order to avoid creating an inflation problem in the future as opposed to slowing down the strengthening economy. In other words, the Fed was trying to head off inflation *before* it became a problem. During the period following the August 8, 2006 FOMC meeting, the Fed's decisions not to raise rates were viewed as a gamble that a slower U.S. economy would help to cap growing inflationary pressures. 22

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<sup>&</sup>lt;sup>21</sup> McKinnon, John D. and Greg IP, "Fed Raises Rates by a Quarter Point," <u>The Wall Street Journal</u>, September 22, 2004.

<sup>&</sup>lt;sup>22</sup> Ip, Greg, "Fed Holds Interest Rates Steady As Slowdown Outweighs Inflation," <u>The Wall Street Journal Online Edition</u>, August 8, 2006.

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- Q. Was the Fed attempting to engineer another "soft landing", as it did in the mid-nineties, by holding interest rates steady?
- A. Yes, however, as pointed out in an August 2006 article in The Wall Street Journal by E.S. Browning, soft landings, like the one that the Fed managed to pull off during the 1994 - 1995 time frame, in which a recession or a bear market were avoided rarely happen<sup>23</sup>. Since it began increasing the federal funds rate in June 2004, the Fed has assured investors that it would increase rates at a "measured" pace. Many analysts and economists interpreted this language to mean that former Chairman Greenspan would be cautious in increasing interest rates too guickly in order to avoid what is considered to be one of the Fed's few blunders during Greenspan's tenure – a series of increases in 1994 that caught the financial markets by surprise after a long period of low rates. The rapid rise in rates contributed to the bankruptcy of Orange County, California and the Mexican peso crisis<sup>24</sup>. According to Mr. Browning, the hope, at the time that his article was published, was that Chairman Bernanke would succeed in slowing the economy "just enough to prevent serious inflation, but not enough to choke off growth." In other words, "a 'Goldilocks economy,' in which growth is not too hot and not too cold."

<sup>&</sup>lt;sup>23</sup> Browning, E.S, "Not Too Fast, Not Too Slow...," The Wall Street Journal Online Edition, August 21, 2006. <sup>24</sup> Associated Press (AP), "Fed begins debating interest rates" <u>USA Today</u>, June 29, 2004.

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- Q. Has the Fed's attempt to engineer a soft landing been successful to date?
- A. It would appear so. Fairly recent articles published in the mainstream financial press have been generally upbeat on the current economy. An example of this is an article written by Nell Henderson that appeared in the January 30, 2007 edition of <a href="The Washington Post">The Washington Post</a>. According to Ms. Henderson, "a year into [Fed Chairman] Bernanke's tenure, the [economic] picture has turned considerably brighter. Inflation is falling; unemployment is low; wages are rising; and the economy, despite continued problems in housing, is growing at a brisk clip." 25
- Q. Putting this all into perspective, how have the Fed's actions since 2001 affected benchmark rates?
- A. Despite the increases by the FOMC, interest rates and yields on U.S. Treasury instruments are for the most part still at historically low levels. The Fed's actions have also had the overall effect of reducing the cost of many types of business and consumer loans. As can be seen in Schedule WAR-8, with the exception of the federal discount rate (the rate charged to member banks), which has increased to 6.25 percent from 5.73 percent in 2000, the other key interest rates (i.e. the prime rate and the federal funds rate) are still below their year-end 2000 levels. Value Line analyst Nils C. Van Liew took note of the current environment of low interest rates

<sup>&</sup>lt;sup>25</sup> Henderson, Nell, "Bullish on Bernanke" <u>The Washington Post</u>, January 30, 2007.

recently. In Value Line's Electric Utility (East) Industry update dated March 2, 2007, Mr. Van Liew had this to say:

"Several factors are, no doubt, driving the electric utilities' strong share - price performance. Perhaps most important is a benign interest-rate environment. Utilities frequently tap the credit markets to fund their operations. (Low interest rates mean they can cost-effectively build new power plants and maintain existing ones.) 'Cheap money' also tends to drive economic expansion, thereby increasing electricity demand. That said, interest rates should remain relatively low, though the likelihood that the Federal Reserve eases (monetary) policy is small, given persistent inflation concerns."

Mr. Van Liew's remarks are, for the most part, also applicable to the water utility industry.

- Q. What has been the trend in other leading interest rates over the last year?
- A. As of February 28, 2007, the leading interest rates are showing mixed results. The prime rate has increased from 7.50 percent a year ago to its current level of 8.25 percent. The benchmark federal funds rate, just discussed, has increased from 4.50 percent, in March 2006, to its current level of 5.25 percent (the result of the seventeen quarter point increases noted earlier). The yields on several maturities of U.S. Treasury instruments have increased over the past year. A previous trend, described by former Chairman Greenspan as a "conundrum" in which long-term rates fell as short-term rates increased, thus creating the inverted yield curve that currently exists (Attachment G), appears to have

ended. The 91-day T-bill rate, used in my CAPM analysis, increased from

<sup>&</sup>lt;sup>26</sup> Wolk, Martin, "Greenspan wrestling with rate 'conundrum'," <u>MSNBC</u>, June 8, 2005.

4.59 percent, in March 2006, to 5.12 percent as of February 28, 2007. The 1-Year Treasury constant maturity rate also increased from 4.74 percent over the past year to 4.93 percent. Again, for the most part, these current yields are lower than corresponding yields that existed during the early nineties (as can be seen on Schedule WAR-8).

Q. What is the current outlook for interest rates, inflation, and the economy?

A. Stability is the word that best sums up analyst's expectations for the majority of 2007 according to an article by Peter A. McKay that appeared in the January 29, 2007 issue of <u>The Wall Street Journal</u><sup>27</sup>. Mr. McKay reported on Fed watchers that have revised their expectations for a spring rate cut and who now believe that the Fed will keep rates at their current levels through the end of 2007. As expected, the Fed continued to hold pat on interest rates, for the sixth straight time<sup>28</sup>, during the FOMC meetings held on March 20 and 21, 2007.

The recent views of Value Line analysts, who anticipate lower rates of inflation in the coming months, support the aforementioned outlook for stable rates. In their Economic and Stock Market Commentary that appeared in the February 2, 2007 edition of Value Line's <u>Selection and Opinion</u> publication, Value Line's analyst's stated the following:

<sup>&</sup>lt;sup>27</sup> McKay, Peter A., "A Long Stretch of Steady Rates" <u>The Wall Street Journal</u>, January 29, 2007

<sup>&</sup>lt;sup>28</sup> Blackstone, Brian and Campion Walsh, "Fed Holds Rates Steady, Softens Tightening Bias" <u>The Wall Street Journal</u>, March 21, 2007

in part because the modest rate of GDP growth should cap the the increases in demand for labor and raw materials. Moreover, recent declines in oil prices will keep costs down for products that are oil-based and for companies that are heavy users of electricity."

"Inflation is likely to start trending lower over the next few quarters."

On March 23, 2007 Value Line's analysts had this to say:

"Housing remains one of the wild cards in the economic situation. Recent months have seen this market weaken further, as slumping demand and higher monthly payments (for those with mortgages where the rates are now rising) have forced prices downward in a number of regions of the country. Should the recent gains in personal income and the brighter employment outlook help to gradually lessen the housing pressures, as we suspect, this sector should see its long decline moderate in the next few quarters.

- Q. Please summarize how the economic data just presented relates to Arizona-American.
- A. If Federal Reserve Chairman Bernanke continues to keep inflation in check, and keep it contained within his preferred range of 1 to 2 percent<sup>29</sup>, Arizona-American could look forward to relatively stable and even possibly declining prices for goods and services, which in turn means that the Company can expect its present operating expenses to either remain stable or possibly decline in the coming years. Lower interest rates would also benefit Arizona-American in regard to any short or long-term borrowing needs that the Company may have. Despite the recent slowdown in the housing market noted earlier, lower interest rates would further help to accelerate growth in new construction projects and home

<sup>&</sup>lt;sup>29</sup> Ip, Greg, "Fed Minutes Indicate Inflation Still a Worry for Some Officials," <u>The Wall Street Journal</u>, February 22, 2006.

developments in the Company's service territories, and may result in new revenue streams to Arizona-American.

- Q. What has been the trend in Value Line's return on common equity projections for the water utility industry over the last seven years?
- A. Up until 2005, and with the exception of 2003, Value Line's analysts have been making downward projections on water industry book returns on common equity ("ROE"). The following is a summary of Value Line's water utility industry composite statistics on ROE, over the aforementioned period, which are exhibited in Attachment D of my testimony:

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### Value Line Published Projected Returns 2000 - 2005

13		<u>2000</u>	<u>2001</u>	<u>2003-05</u>
14	Value Line ROE Projection – Nov. 3, 2000	11.0%	11.0%	12.0%
15		<u>2001</u>	2002	2004-06
16	Value Line ROE Projection – Nov. 2, 2001	10.5%	11.0%	11.5%
17		<u>2002</u>	<u>2003</u>	<u>2005-07</u>
18	Value Line ROE Projection – Nov. 1, 2002	10.0%	10.5%	11.5%
19		2003	<u>2004</u>	<u>2006-08</u>
20	Value Line ROE Projection – Oct. 31, 2003	10.0%	11.0%	12.0%
21		2004	<u>2005</u>	<u>2007-09</u>
22	Value Line ROE Projection – Oct. 29, 2004	9.5%	9.5%	10.0%
23		2005	<u>2006</u>	<u>2008-10</u>
24	Value Line ROE Projection – Oct. 28, 2005	11.0%	11.0%	11.5%
25		2006	<u>2007</u>	2009-11
26	Value Line ROE Projection – Oct. 28, 2006	9.5%	10.5%	11.5%

	2006	<u>2007</u>	<u>2009-11</u>
Value Line ROE Projection – Jan 26, 2007	9.0%	10.0%	10.5%

Value Line	Publish	ned Act	ual Retu	<u>urns 20</u>	<u>01 - 200</u>	6 <sup>30</sup>
<u>2001</u>	2002	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	
10.7%	11 1%	8.8%	9.0%	9.8%	9.0%	

In addition to the downward trend in projections that I just addressed, the above summary also illustrates the fact that Value Line's analysts have been somewhat more optimistic in their forward-looking one-year and long-term projections. As can be seen below, Value Line's analysts have been somewhat high in their coming year projections on ROE.

<u>Year</u>	Value Line <u>Projected</u>	Actual Book Return on ROE	Difference
2001	11.0%	10.7%	-30 Basis Points
2002	11.0%	11.1%	10 Basis Points
2003	10.5%	8.8%	-170 Basis Points
2004	11.0%	9.0%	-200 Basis Points
2005	11.0%	9.8%	-120 Basis Points
2006	11.0%	9.0%	-200 Basis Points

As can be seen above, with the exception of the 2002 operating period, Value Line's analyst's projections on water utility ROE's from one year out were 30 to 200 basis points higher than the actual returns booked by the water utilities. This is why I do not rely on the face value of analyst's

<sup>&</sup>lt;sup>30</sup> Result for 2001 obtained from Value Line's Water Utility Industry update published January 27, 2006. All other results obtained from Value Line's Water Utility Industry update published January 26, 2007.

projections and only use Value Line's and Zack's projections as guides in developing my growth estimates for the DCF model.

Q. After weighing the economic information that you've just discussed, do you believe that the 10.27 percent cost of equity capital that you have estimated is reasonable for Arizona-American?

A. I believe that my recommended 10.27 percent cost of equity will provide Arizona-American's Anthem/Agua Fria Districts with a reasonable rate of return on the Company's invested capital when economic data on interest rates (that are still low by historical standards), continued growth in new housing construction (attributed to historically low interest rates), and a low and stable outlook for inflation are all taken into consideration. As I noted earlier, the <a href="Hope">Hope</a> decision determined that a utility is entitled to earn a rate of return that is commensurate with the returns it would make on other investments with comparable risk. I believe that my DCF analysis has produced such a return.

#### **COST OF DEBT**

- Q. Have you reviewed Arizona-American's testimony on the Company-proposed cost of debt?

Yes, I have reviewed the revised direct testimony, filed on August 4, 2006,
 of Company witness Thomas M. Broderick who testified on Arizona-

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American's proposed capital structure and cost of debt for the 2 Anthem/Agua Fria Districts. 3 4 Q.

- Briefly explain how Arizona-American calculated the Company-proposed cost of debt.
- A. The Company-proposed cost of debt is the weighted cost of Arizona-American's various debt instruments that were issued to finance assets that were in place during the Test Year. In arriving at the Companyproposed 6.05 percent weighted cost of these instruments, Mr. Broderick made a pro forma adjustment to reflect a planned November 2006 refinancing of the Company's November '01 series and January '02 series bonds at an interest rate of 6.42 percent over a twenty-year period.

- Q. Do you agree with Mr. Broderick's pro forma adjustment on the refinancing of the Company's November '01 series and January '02 series bonds?
- Α. No. Mr. Broderick's testimony does not contain recent information on the refinancing of the Company's November '01 series and January '02 series bonds. On October 20, 2006, the Commission approved the Company's financing request on this matter in Decision No. 68994, dated October 20, On January 8, 2007, the Company filed a 2006 (Attachment E). compliance report (Attachment F) containing copies of the executed loan agreements (i.e. promissory notes) that stated the borrowing terms on three loans totaling \$159 million at rates of interest ranging from 5.39

1 percent to 5.62 percent over periods ranging from six to twelve years. I 2 have included the information on these three loans on Schedule WAR-1, 3 Page 2 of 3 to arrive at my recommended weighted cost of debt of 5.37 4 percent. 5 6 CAPITAL STRUCTURE 7 Q. Have you reviewed Arizona-American's testimony regarding the 8 Company's proposed capital structure? 9 A. Yes, I have reviewed the direct testimony of Mr. Broderick. 10 11 Q. Please describe the Company's proposed capital structure. 12 Α. The Company is proposing a projected capital structure comprised of 60 13 percent debt and 40 percent common equity. 14 15 Q. What capital structure are you proposing for Arizona-American? 16 A. I have adopted the Company-proposed capital structure. 17 18 Q. Is Arizona-American's capital structure in line with industry averages? 19 A. No. As I explained earlier in my testimony, Arizona-American's capital 20 structure is heavier in debt than the capital structures of the other water 21 companies included in my cost of capital analysis (Schedule WAR-9). The 22 capital structures for those utilities averaged 50.1 percent for debt and

49.9 percent for equity (48.7 percent common equity + 1.2 percent preferred equity).

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Q. In terms of risk, how does Arizona-American's capital structure compare to the water utilities in your sample?

6 A. The water utilities in my sample would be considered as having a lower 7 level of financial risk (i.e. the risk associated with debt repayment) 8 because of their lower levels of debt. The additional financial risk due to 9 debt leverage is embedded in the cost of equities derived for those 10 companies through the DCF analysis. Thus, the cost of equity derived in 11 my DCF analysis is applicable to companies that are not as leveraged 12 and, theoretically speaking, not as risky than a utility with a level of debt 13 similar to Arizona-American's. In the case of a publicly traded company, 14 such as those included in my proxy, a company with Arizona-American's 15 level of debt would be perceived as having a higher level of financial risk 16 and would therefore also have a higher expected return on common

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equity.

Q. Have you made an adjustment to your DCF estimate based on this perception of higher financial risk?

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recommended cost of equity based on the results of my DCF analysis. I believe that this adjustment, along with the hypothetical capital structure

Yes. As discussed earlier, I have made a 50 basis point adjustment to my

that I am recommending, provides the Company with a return on common equity that will compensate the Company's shareholders for the higher financial risk that they face.

#### **WEIGHTED COST OF CAPITAL**

- Q. How does the Company's proposed weighted cost of capital compare with your recommendation?
- A. The Company has proposed a weighted cost of capital of 8.33 percent.

  This composite figure is the result of a weighted average of Arizona
  American's proposed 6.05 percent cost of debt and 11.75 percent cost of

  equity capital for the Anthem/Agua Fria Division. The Company-proposed

  8.33 percent weighted cost of capital is 100 basis points higher than the

  7.33 percent weighted cost that I am recommending.

#### COMMENTS ON ARIZONA-AMERICAN'S COST OF EQUITY CAPITAL

## **TESTIMONY**

- Q. How does your recommended cost of equity capital compare with the cost of equity capital proposed by the Company?
- A. The 11.75 percent cost of equity capital proposed by the Company is 148 basis points higher than the 10.27 percent cost of equity capital that I am recommending.

- Q. Who estimated the Company-proposed cost of equity capital?
- A. As noted earlier Dr. Bente Villadsen, a principal of the Brattle Group, a consulting firm located in Cambridge, Massachusetts, estimated the Company-proposed cost of equity capital. Dr. Villadsen estimated a cost of common equity to be within a range of 11.25 percent to 12.75 percent. Her final recommendation is 11.75 percent. In arriving at her recommended cost of equity, Dr. Villadsen employs an after tax weighted average cost of capital ("ATWACC") methodology which was advocated by Dr. A. Lawrence Kolbe, also of the Brattle Group, in a prior Arizona-American proceeding that involved the Company's Paradise Valley Water District.

Q. Did the Commission adopt Dr. Kolbe's ATWACC methodology in the Company's Paradise Valley Water District proceeding?

- A. No. Dr. Kolbe's ATWACC methodology for estimating the cost of equity capital for the Company's Paradise Valley Water District was rejected by the Commission<sup>31</sup>.
- Q. What methods did Dr. Villadsen use to arrive at her cost of common equity for the Anthem/Agua Fria Districts?
- A. Dr. Villadsen used two methods to estimate a cost of equity capital. The DCF method and what she refers to in her testimony as a risk positioning

<sup>&</sup>lt;sup>31</sup> Decision No. 68858, Dated July 28, 2006

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method, which utilizes both the CAPM and empirical CAPM ("ECAPM") models that use unadjusted betas. Dr. Villadsen places more emphases on the results of her risk positioning analysis as opposed to the DCF. In making her final cost of equity estimates for each methodology that she uses, Dr. Villadsen makes the upward adjustments advocated by Dr. Kolbe in order to arrive at an after tax weighted average cost of capital ("ATWACC") for the Anthem/Aqua Fria Districts.

### **DCF Comparison**

- Q. Were there any differences in the way that you conducted your DCF analysis and the way that Dr. Villadsen conducted hers?
- A. Yes, Dr. Villadsen conducted two separate DCF analyses. Her first DCF analysis is a one-step constant growth model, similar to the one that I used, which uses a proxy of six water providers. Dr. Villadsen's second DCF analysis is a variation on the two-step or multi-stage growth DCF model.

Q. Why didn't you conduct a multi-stage DCF analysis like the one conducted by Dr. Villadsen?

A. Primarily because the growth rate component that I estimated for my single-stage model already takes into consideration both the near-term and long-term growth rate projections that Dr. Villadsen averaged in her multi-stage model. This being the case, I saw no need to conduct a

separate DCF analysis. As I pointed out earlier in my testimony, the method that I used also takes into consideration analysts' tendency to make overly optimistic growth estimates. This tendency, referred to as optimism bias by Dr. Villadsen, is addressed in Appendix C of her testimony and, according to Dr. Villadsen, is eliminated by the use of a long-term growth rate estimate for gross domestic product ("GDP") in her multi-stage model.

Q. What is the difference between your DCF results and Dr. Villadsen's first DCF result?

Α.

uses an average of four sample water companies, is 199 to 219 basis points lower than the averages of 10.80 to 11.00 percent derived in Dr.

Villadsen's one-step DCF analysis, which is an average of six sample

The 8.81 percent cost of common equity derived in my DCF analysis, that

Dr. Villadsen's testimony). This comparison does not include a number of

water companies (as exhibited in column 3 of Table No. BV-7 Panel A of

other factors (i.e. debt and equity ratios and income tax rates) which Dr.

Villadsen employs to reduce the aforementioned averages to a range of

8.90 to 9.10 percent respectively for the ATWACC.

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- Q. Please explain why your 8.81 percent DCF result is 199 to 219 basis points lower than the 10.80 to 11.00 percent range produced in Dr. Villadsen's one-step DCF model.
- A. One reason is the dividend yield calculation, which can be attributed to observation period timing. Over the past two years there have been no substantial changes in dividend payouts but stock prices have decreased for three of the four water companies included in my sample. Dr. Villadsen's dividend yields are attributed to the fact that her average stock prices, (P<sub>0</sub>) of the DCF formula (k = (D<sub>1</sub> ÷ P<sub>0</sub>) + g), were taken over a shorter fifteen day observation period during March of 2006 when the water companies in her sample were trading at different prices than they were during the longer eight-week observation period (January 19, 2007 to March 9, 2007) that I based my calculation on. The difference between the average closing stock prices used in my analysis and Dr. Villadsen's analysis are as follows:

Villadsen Difference Rigsby AWR \$38.45 \$36.44 \$2.01 CWT \$39.96 \$43.41 -\$3.45 SWWC -\$3.55 \$12.87 \$16.42 WTR \$22.65 \$27.52 -\$4.87

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Concentrating strictly on the four water companies used in my sample, her analysis produced an approximate average annualized dividend yield of 1.88 percent versus the 2.29 percent, which I calculated (Schedule WAR-3). In the growth portion (g) of her first DCF analysis, Dr. Villadsen relied on IBES and Value Line analysts' long-term growth rate estimates to arrive at a quarterly growth rate that she applied to each of her sample companies. This resulted in an approximate average growth rate of 9.80 percent, for the four water companies in my sample versus my 6.52 percent growth rate (Schedules WAR-4 and WAR-6). The apples-toapples comparison of the DCF results for the four common companies (i.e. AWR, CWT, SWWC and WTR) used in our sample would be 11.68 percent for Dr. Villadsen (before any other adjustments made by Dr. Villadsen) versus my 8.81 percent. The main difference between her estimate and mine are the growth estimates that she has calculated for her model (Table No. BV-5).

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- Q. What is the difference between your DCF result and Dr. Villadsen's twostep or multi-stage growth model DCF result?
- A. The 8.81 percent cost of common equity derived in my DCF analysis (that uses four sample water companies) is 71 basis points higher than the 8.10 percent cost of common equity derived in Dr. Villadsen's two-step DCF analysis that used long-term GDP growth estimates (which she believes helps to eliminate optimism bias) and is an average of six sample water

companies (as exhibited in column 3 of Table No. BV-7 Panel B of Dr. Villadsen's testimony). Once again, this comparison does not include the other factors that I noted earlier which Dr. Villadsen employs to reduce the aforementioned averages to a range of 6.80 to 6.90 percent respectively for the ATWACC figure that she displays in her testimony.

Q. What were the results of Dr. Villadsen's DCF analysis using a sample of natural gas providers?

A. Dr. Villadsen's DCF analyses of seven LDC's (which contained five of the ten LDC's used in my sample), produced results that ranged from 10.00 to 10.40 for the single stage model to 9.70 for the multi-stage model (once again this is before any further ATWACC adjustments). Her ATWACC results ranged from 7.40 to 7.50 in the single stage model and 7.00 to 7.40 in her multi-stage model. Her pre-ATWACC DCF results (for both models) ranged from 52 basis points lower to 122 basis points higher than the 9.18 percent result that I obtained from my single stage model. Her ATWACC results (for both models) ranged from 168 to 218 basis points lower than the 9.18 percent result that I obtained from my single stage model.

## **CAPM Comparison**

- Q. What financial instruments did Dr. Villadsen use as proxies for her longterm and short-term risk free rates of return in her risk positioning analysis that uses the CAPM and ECAPM models?
- A. Dr. Villadsen used the 20-year U.S. Treasury constant maturity rate for her long-term instrument and a 1-month U.S. Treasury constant maturity rate for her short-term instrument. The 5.21 percent long-term and 4.60 percent short-term rates used in her models reflect a fifteen trading-day average, for each of the aforementioned Treasury instruments, during an observation period that ended on April 25, 2006.

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Q. Where do Dr. Villadsen's 5.21 percent long-term and 4.60 percent shortterm rates stand in the current interest rate environment?

As of March 19, 2007, Dr. Villadsen's long-term rate of 5.21 percent is 51

where short-term yields are actually higher than long-term yields. As of

February 28, 2007, the spread between the three-month T-bill yield of 5.12

basis point higher than the 4.70 percent weekly average of the 20-year Treasury constant maturity rate that appears on the Federal Reserve's website<sup>32</sup>. Her short-term rate of 4.60 percent is 60 basis points lower than the 5.20 percent Treasury constant maturity rate that also appears on the Federal Reserve's website. This is consistent with the inverted yield curve situation that currently exists (as can be seen in Attachment G),

http://www.federalreserve.gov/releases/H15/Current/

percent and the 30-year Treasury Bond yield of 4.68 percent was 44 basis points. Given these facts, I believe my 5.14 percent average T-Bill rate is producing a good middle-of-the road estimate.

Q. Did Dr. Villadsen use the same Value Line betas that you used in your analysis?

A. No. As I noted earlier Dr. Villadsen used lower unadjusted betas in her CAPM and ECAPM models as opposed to the higher adjusted betas that I used. The use of adjusted betas in the ECAPM model typically produces unreliable results. The lower betas also contributed to Dr. Villadsen's lower unadjusted CAPM results.

Q. Please compare the market risk premium used in your CAPM analysis with the market risk premium used by Dr. Villadsen.

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A. I used a market risk premium of 5.26 percent in my model using a geometric mean and a market risk premium of 7.16 percent in my model using an arithmetic mean. Dr. Villadsen used a market risk premium of 8.00 percent in her short-term analyses and a market risk premium of 6.50 percent in her long-term analyses.

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- Q. Please describe the results of Dr. Villadsen's risk positioning analysis that used both the CAPM and ECAPM models.
  - For water providers Dr. Villadsen's obtained results ranging from 8.70 percent to 10.30 percent using unadjusted Value Line betas and a long-term rate of 5.21 percent, in the Sharpe-Litner version of the CAPM and in two separate versions of the ECAPM. Dr. Villadsen's short-term results for water providers, using a risk free rate of 4.60 percent in the Sharpe-Litner version of the CAPM and in three different versions of the ECAPM, ranged from 8.90 to 10.30 percent. Dr. Villadsen's ATWACC estimate for the Anthem/Agua Fria Districts ranged from 7.00 percent to 7.50 percent using the long-term 5.21 percent rate and 7.10 percent to 8.10 percent using the short-term 4.60 percent rate.
    - For natural gas LDC's, Dr. Villadsen's results ranged from 9.30 percent to 9.90 percent using unadjusted Value Line betas and a long-term rate of 5.21 percent in the Sharpe-Litner version of the CAPM and in two separate versions of the ECAPM. Dr. Villadsen's short-term results for LDC's, using a risk free rate of 4.60 percent and three different versions of ECAPM, ranged from 9.60 to 10.70 percent. Dr. Villadsen's ATWACC for the Anthem/Agua Fria Districts ranged from 6.60 percent to 7.30 percent using the long-term 5.21 percent rate and 6.80 percent to 7.80 percent using the short-term 4.60 percent rate.

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- Q. Please compare the results of your CAPM analyses based on a sample of water providers with the results of Dr. Villadsen's risk positioning analysis that looked at water providers.
  - The 9.74 percent result of my CAPM analysis using a geometric mean falls 104 basis points higher to 56 basis points lower than Dr. Villadsen's unadjusted 8.70 percent to 10.30 percent long-term results and is 84 basis points higher to 56 basis points lower than the results of her short-term The 11.40 percent result of my CAPM analysis using an results. arithmetic mean is 110 to 270 basis points higher than the long-term unadjusted results estimated by Dr. Villadsen and is 110 to 250 basis points higher than Dr. Villadsen's short-term estimates. Dr. Villadsen's long-term ATWACC estimates are to 224 to 274 basis points lower than my 9.74 percent estimate using a geometric mean and 390 to 440 basis points lower than my 11.40 percent estimate using an arithmetic mean. Her short-term ATWACC results are 164 to 264 basis points lower than my 9.74 percent estimate using a geometric mean. My 11.40 percent estimate using an arithmetic mean falls 390 basis points to 440 basis points above Dr. Villadsen's long-term ATWACC estimates of 7.00 percent to 7.50 percent and 330 basis points to 430 basis points above Dr. Villadsen's short-term ATWACC estimates of 7.10 percent to 8.10 percent.

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- Q. Please compare the results of your CAPM analyses based on a sample of natural gas LDC's with the results of Dr. Villadsen's risk positioning analysis that looked at LDC's.
- Α. The 9.69 percent result of my CAPM analysis using a geometric mean falls between Dr. Villadsen's unadjusted 8.7 percent to 10.30 percent longterm results and also falls between her short-term results ranging from 8.90 to 10.30 percent. The 11.04 percent result of my CAPM analysis using an arithmetic mean is 103 to 263 basis points higher than the unadjusted long-term results estimated by Dr. Villadsen and is 103 to 243 basis points higher than Dr. Villadsen's short-term estimates. Dr. Villadsen's long-term ATWACC estimates are 219 to 269 basis points higher than my 9.69 percent estimate using a geometric mean and 383 to 433 basis points higher than my 11.33 percent estimate using an arithmetic mean. Her short-term ATWACC results are 159 to 259 basis points lower than my 9.69 percent estimate using a geometric mean. My 11.33 percent estimate using an arithmetic mean falls above Dr. Villadsen's short-term ATWACC estimates of 7.10 to 8.10 percent.
- Q. How did Dr. Villadsen arrive at her final 11.75 percent cost of common equity for the Anthem/Agua Fria Districts?
- A. Dr. Villadsen's used the mid-point of her estimated 11.25 percent to 12.75 percent range on a cost of equity capital for the Anthem/Agua Fria Districts.

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- Q. Please comment on the ATWACC methodology that Dr. Villadsen applied to arrive at her higher cost of equity estimates.
  - Dr. Villadsen believes that the use of the Commission rejected ATWACC methodology produces a better cost of equity estimate given Arizona-American's leveraged capital structure. While I believe that the ATWACC may have weight in regard to business entities that operate in a truly competitive environment, the higher rate of return that she advocates for the Anthem/Aqua Fria Districts is not warranted. While Arizona-American may have a higher degree of financial risk, as a result of the Company's leveraged capital structure, it is still a regulated entity that can apply for rate relief when the need arises. This being the case, the Company is actually less risky than firms that have nothing to turn to but bankruptcy court when their debt becomes excessively burdensome. The fact that the ACC has allowed cost recovery for increased water-testing costs, deferred Central Arizona Project costs and the costs associated with more stringent levels of arsenic is proof that water utilities in Arizona operate in a favorable regulatory environment which eliminates the need for the higher rates of return advocated by Dr. Villadsen. For these reasons I believe that the Commission should adopt my recommended 10.27 percent return on common equity, which contains a 50 basis point upward adjustment for the Company's financial risk.

Direct	Testi	mony	of V	Villiam	Α.	Rigsby
Docke	et No	WS-0	130	3A-06-	-04	03

- Q. Does your silence on any of the issues, matters or findings addressed in the testimony of Dr., Villadsen, Mr. Broderick or any other witness for Arizona-American constitute your acceptance of their positions on such issues, matters or findings?
- 5 A. No, it does not.

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- 7 Q. Does this conclude your testimony on Arizona-American's Anthem/Agua 8 Fria Districts?
  - A. Yes, it does.

### Qualifications of William A. Rigsby, CRRA

**EDUCATION:** University of Phoenix

Master of Business Administration, Emphasis in Accounting, 1993

Arizona State University College of Business

Bachelor of Science, Finance, 1990

Mesa Community College

Associate of Applied Science, Banking and Finance, 1986

Society of Utility and Regulatory Financial Analysts 38th Annual Financial Forum and CRRA Examination Georgetown University Conference Center, Washington D.C. Awarded the Certified Rate of Return Analyst designation after successfully completing SURFA's CRRA examination.

Michigan State University Institute of Public Utilities

N.A.R.U.C. Annual Regulatory Studies Program, 1997 &1999

Florida State University

Center for Professional Development & Public Service N.A.R.U.C. Annual Western Utility Rate School, 1996

**EXPERIENCE:** Public Utilities Analyst V

Residential Utility Consumer Office

Phoenix, Arizona April 2001 – Present

Senior Rate Analyst

Accounting & Rates - Financial Analysis Unit Arizona Corporation Commission, Utilities Division

Phoenix, Arizona July 1999 – April 2001

Senior Rate Analyst

Residential Utility Consumer Office

Phoenix, Arizona

December 1997 - July 1999

Utilities Auditor II and III

Accounting & Rates - Revenue Requirements Analysis Unit

Arizona Corporation Commission, Utilities Division

Phoenix, Arizona

October 1994 - November 1997

Tax Examiner Technician I / Revenue Auditor II

Arizona Department of Revenue

Transaction Privilege / Corporate Income Tax Audit Units

Phoenix, Arizona

July 1991 - October 1994

# Appendix 1

## RESUME OF RATE CASE AND REGULATORY PARTICIPATION

Utility Company	Docket No.	Type of Proceeding
ICR Water Users Association	U-2824-94-389	Original CC&N
Rincon Water Company	U-1723-95-122	Rate Increase
Ash Fork Development Association, Inc.	E-1004-95-124	Rate Increase
Parker Lakeview Estates Homeowners Association, Inc.	U-1853-95-328	Rate Increase
Mirabell Water Company, Inc.	U-2368-95-449	Rate Increase
Bonita Creek Land and Homeowner's Association	U-2195-95-494	Rate Increase
Pineview Land & Water Company	U-1676-96-161	Rate Increase
Pineview Land & Water Company	U-1676-96-352	Financing
Montezuma Estates Property Owners Association	U-2064-96-465	Rate Increase
Houghland Water Company	U-2338-96-603 et al	Rate Increase
Sunrise Vistas Utilities Company – Water Division	U-2625-97-074	Rate Increase
Sunrise Vistas Utilities Company – Sewer Division	U-2625-97-075	Rate Increase
Holiday Enterprises, Inc. dba Holiday Water Company	U-1896-97-302	Rate Increase
Gardener Water Company	U-2373-97-499	Rate Increase
Cienega Water Company	W-2034-97-473	Rate Increase
Rincon Water Company	W-1723-97-414	Financing/Auth. To Issue Stock
Vail Water Company	W-01651A-97-0539 et al	Rate Increase
Bermuda Water Company, Inc.	W-01812A-98-0390	Rate Increase
Bella Vista Water Company	W-02465A-98-0458	Rate Increase
Pima Utility Company	SW-02199A-98-0578	Rate Increase

# Appendix 1

# **RESUME OF RATE CASE AND REGULATORY PARTICIPATION (Cont.)**

Utility Company	Docket No.	Type of Proceeding
Pineview Water Company	W-01676A-99-0261	WIFA Financing
I.M. Water Company, Inc.	W-02191A-99-0415	Financing
Marana Water Service, Inc.	W-01493A-99-0398	WIFA Financing
Tonto Hills Utility Company	W-02483A-99-0558	WIFA Financing
New Life Trust, Inc. dba Dateland Utilities	W-03537A-99-0530	Financing
GTE California, Inc.	T-01954B-99-0511	Sale of Assets
Citizens Utilities Rural Company, Inc.	T-01846B-99-0511	Sale of Assets
MCO Properties, Inc.	W-02113A-00-0233	Reorganization
American States Water Company	W-02113A-00-0233	Reorganization
Arizona-American Water Company	W-01303A-00-0327	Financing
Arizona Electric Power Cooperative	E-01773A-00-0227	Financing
360networks (USA) Inc.	T-03777A-00-0575	Financing
Beardsley Water Company, Inc.	W-02074A-00-0482	WIFA Financing
Mirabell Water Company	W-02368A-00-0461	WIFA Financing
Rio Verde Utilities, Inc.	WS-02156A-00-0321 et al	Rate Increase/ Financing
Arizona Water Company	W-01445A-00-0749	Financing
Loma Linda Estates, Inc.	W-02211A-00-0975	Rate Increase
Arizona Water Company	W-01445A-00-0962	Rate Increase
Mountain Pass Utility Company	SW-03841A-01-0166	Financing
Picacho Sewer Company	SW-03709A-01-0165	Financing
Picacho Water Company	W-03528A-01-0169	Financing
Ridgeview Utility Company	W-03861A-01-0167	Financing
Green Valley Water Company	W-02025A-01-0559	Rate Increase
Bella Vista Water Company	W-02465A-01-0776	Rate Increase
Arizona Water Company	W-01445A-02-0619	Rate Increase

# Appendix 1

# RESUME OF RATE CASE AND REGULATORY PARTICIPATION (Cont.)

<u>Utility Company</u>	Docket No.	Type of Proceeding
Arizona-American Water Company	W-01303A-02-0867 et al.	Rate Increase
Arizona Public Service Company	E-01345A-03-0437	Rate Increase
Rio Rico Utilities, Inc.	WS-02676A-03-0434	Rate Increase
Qwest Corporation	T-01051B-03-0454	Renewed Price Cap
Chaparral City Water Company	W-02113A-04-0616	Rate Increase
Arizona Water Company	W-01445A-04-0650	Rate Increase
Tucson Electric Power	E-01933A-04-0408	Rate Review
Southwest Gas Corporation	G-01551A-04-0876	Rate Increase
Arizona-American Water Company	W-01303A-05-0405	Rate Increase
Black Mountain Sewer Corporation	SW-02361A-05-0657	Rate Increase
Far West Water & Sewer Company	WS-03478A-05-0801	Rate Increase
Gold Canyon Sewer Company	SW-02519A-06-0015	Rate Increase
Arizona Public Service Company	E-01345A-05-0816	Rate Increase
Arizona-American Water Company	W-01303A-06-0014	Rate Increase
Arizona-American Water Company	W-01303A-05-0718	Transaction Approval
Arizona-American Water Company	W-01303A-05-0405	ACRM Filing
UNS Gas, Inc.	G-04204A-06-0463	Rate Increase



Many of the stock's in the Water Utility industry have continued to benefit from more favorable regulatory backing since our October review. Nevertheless, as usual, the industry, as a whole, ranks at the very bottom of the Value Line investment universe for Timeliness. Elevated well and waterway maintenance costs are responsible for most of the blame and will likely continue to dampen profits for years to come. Indeed, the growing need for infrastructure renovations poses a significant threat to the industry's longterm prospects, especially given the capital constraints that most companies are facing. As a result, many investors are going to want to steer clear of the issues in this industry.

## Regulatory Winds at its Back

Regulatory authorities, designed to keep a balance of power between utility providers and consumers, have been extremely tough on utility companies in years past. However, current administrations have taken a much more business-friendly approach in recent months in handing down timely and generally favorable rulings. This has not been more glaringly evident than in California, where the California Public Utilities Commission's board has undergone a major facelift with adversaries being replaced with business supporters. Recent rulings set a good tone for utility providers doing business in the Golden State, which typically request a step-up in rates every year. This augurs particularly well for California Water Service Group and American States Water, which both derive a significant amount of business from California.

#### **But Choppy Waters Lie Ahead**

Even still, the same cannot be said for infrastructure costs. Although regulators are softening their stance on rate case decisions, infrastructure demands are growing more stringent. Many of the current infrastructures are more than 100 years old and in need of serious upkeep, or even complete replacement in some cases. Water companies are being forced to pony up significant cash in order to get their systems up to par. Making matters worse, the Environmental Protection Agency (EPA) continues to increase its water purification standards, given the geopolitical volatility worldwide and the threat of bio-terrorist actions on U.S. water systems. In all, infra-

Composite Statistics: Water Utility Industry								
2002	2003	2004	2005	2006	2007		09-11	
925.2	1030.0	1173.6	1256.9	1350	1450	Revenues (\$mill)	1825	
107.8	112.6	105.7	148.3	155	180	Net Profit (\$mill)	240	
38.6%	39.7%	39.1%	40.5%	39.0%	39.0%	Income Tax Rate	39.0%	
.2%	1.9%	1.0%	1.1%	1.0%	1.0%	AFUDC % to Net Profit	1.0%	
54.1%	51.0%	49.1%	50.4%	50.0%	50.0%	Long-Term Debt Ratio	50.0%	
45.7%	48.8%	50.7%	49.5%	50.0%	50.0%	Common Equity Ratio	50.0%	
2116.4	2449.1	2785.6	3057.5	3360	3650	Total Capital (\$mill)	4500	
2995.1	3405.6	3836.9	4194.7	5350	5750	Net Plant (\$mill)	6800	
6.9%	5.9%	6.0%	6.3%	7.0%	8.0%	Return on Total Cap'l	9.0%	
11.1%	8.8%	9.0%	9.8%	9.0%	10.0%	Return on Shr. Equity	10.5%	
11.1%	8.8%	9.0%	9.8%	9.0%	10.0%	Return on Com Equity	10.5%	
4.0%	2.7%	3.1%	3.7%	3.0%	3.5%	Retained to Com Eq	2.5%	
64%	70%	66%	62%	68%	65%	All Div'ds to Net Prof	62%	
21.6	25.6	25.4	29.4	Dold fi		Avg Ann'l P/E Ratio	18.0	
1.18	1.46	1.34	1.57	Valu	gures are e Line	Relative P/E Ratio	1.20	
3.0%	2.7%	2.6%	2.1%	esti	mates	Avg Ann'l Div'd Yield	2.5%	

## **INDUSTRY TIMELINESS: 96 (of 96)**

structure repair costs are expected to climb into the hundreds of millions of dollars over the next two decades. These extra costs will make it very difficult for most water utility companies to sustain the earnings momentum that we think the improved regulatory landscape will produce this year.

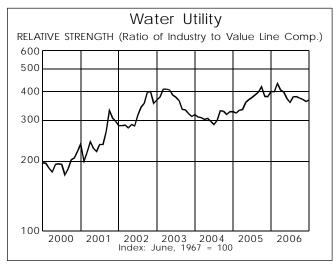
Many of the smaller companies in the industry do not have the resources to meet the capital expenditures that they are being saddled with. Some are deciding to merge with larger, more financially sound enterprises. As a result, some of the biggest water utility companies are growing bigger, faster than ever. Aqua America, for example, has made well over 100 acquisitions in the past five years (28 coming in 2006), based on the aforementioned weakness of smaller players, improved operations and increased their lines. This has drastically increased its customer base and clearly improved its long-term prospects. We expect *Aqua* to continue growing its business via acquisitions as rising water standards spark further consolidation.

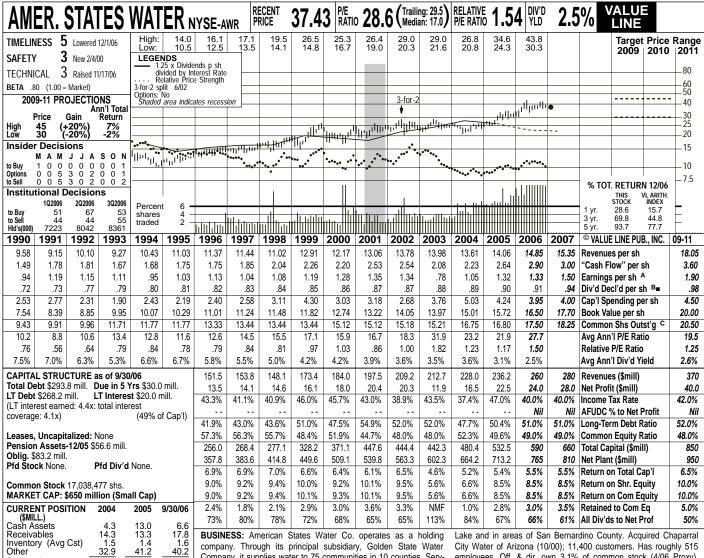
#### **Investment Advice**

Most investors will want to steer clear of the stocks in the Water Utility Industry. Each of the issues in the coming pages hold below average appreciation potential, whether it be for the coming six to 12 months or out to 2009-2011. In fact, each is ranked either 4 or 5 for Timeliness. The growing infrastructure costs and capital constraints mentioned above are likely to continue pressuring bottom lines of water utility companies for years to come.

Meanwhile, most look to have lost their income appeal as well. Higher interest rates have increased the incomeproducing appeal of alternative investments, making the yields found in this industry modestly attractive at best. That said, more conservative investors looking for a steady stream of income may want to take a peek at California Water, which is ranked 2 (Above Average) for Safety. Its yield is still above the *Value Line* average. Nevertheless, we advise all potential investors to carefully look over the individual reports of each company in the next few pages before making any decisions.

Andre J. Costanza





BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Company, it supplies water to 75 communities in 10 counties. Service areas include the greater metropolitan areas of Los Angeles and Orange Counties. The company also provides electric utility services to approximately 23,000 customers in the city of Big Bear

Lake and in areas of San Bernardino County. Acquired Chaparral City Water of Arizona (10/00); 11,400 customers. Has roughly 515 employees. Off. & dir. own 3.1% of common stock (4/06 Proxy). Chairman: Lloyd Ross. President & CEO: Floyd Wicks. Incorporated: CA. Add.: 630 East Foothill Boulevard, San Dimas, CA 91773. Tel.: 909-394-3600. Web: www.aswater.com.

ANNUAL RATES Past Past Est'd '03-'05 10 Yrs. to '09-'11 of change (per sh) 5 Yrs. Revenues "Cash Flow 3.0% 3.0% 1.5% 4.5% 7.5% 3.0% 10.5% 1.5% Earnings Dividends 1.0% Book Value 5.0%

18.2 45.9

86.3

246%

68.9

19.7 27.6

77.6

325%

66.2

23.3 25.6

84

335%

Current Assets

Accts Payable Debt Due

Current Liab.

Fix. Chg. Cov.

Cal- endar			VENUES ( Sep. 30		Full Year
2003	46.7	51.8	63.7	50.5	212.7
2004	46.7	59.3	69.0	53.0	228.0
2005	49.8	60.5	68.1	57.8	236.2
2006	60.6	62.1	73.7	63.6	260
2007	63.0	70.0	80.0	67.0	280
Cal-	E/	RNINGS F	ER SHARI	Α	Full
endar	Mar.31	Jun. 30	Sep. 30	Dec. 31	Year
2003	.20	.19	.51	d.12	.78
2004	.08	.30	.52	.15	1.05
2005	.22	.34	.47	.29	1.32
2006	.35	.36	.32	.30	1.33
2007	.31	.38	.49	.32	1.50
Cal-	QUAR	TERLY DIV	IDENDS P	AID B∎	Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2003	.221	.221	.221	.221	.88
2004	.221	.221	.221	.225	.89
2005	.225	.225	.225	.225	.90
2006	.225	.225	.225	.235	.91
2007	I				1

The regulatory landscape continues to brighten for American States Water. Historically an antagonist to utilities, the California Public Utilities Commission (CPUC) has grown more supportive in recent months. In fact, it recently granted rate hikes for all water service areas of the company's Golden State Water Company (GSWC) unit. The authorized rate increases became effective January 1, 2007 and will likely provide the company with additional annual revenues of roughly \$6 million. The increases include interim rates for GSWC's Region II and III service areas, totaling \$1.36 million. Moreover, the board approved temporary surcharges in Region I water service areas of GSWC to recover previously in-curred supply costs of \$2 million and surcharges amounting to \$744,000 for Region I. The backing of the CPUC augurs well for American as the company does a healthy portion of its business in the Golden State.

Military contracts ought to add some upside to earnings as well. American began supplying military bases in Virginia and Maryland with water within the last

two years. Revenues from these contracts more than doubled in the third quarter and added roughly a nickel per share to the bottom line. The company recently inked a \$19.8 million deal with the U.S. government for infrastructure improvements at Fort Bliss in Texas.

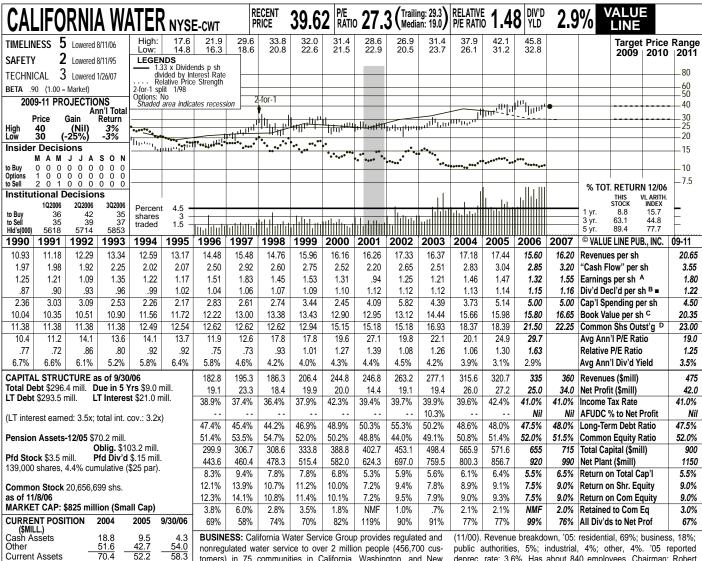
Still, we advise investors to look elsewhere at this time. American shares have fallen by another 10% since our October review and are now ranked 5 (Lowest) for Timeliness according to our momentum-driven rating system. How-ever, they still hold limited 3- to 5-year appreciation potential. Maintenance costs continue to eat away at the company's bottom-line, a trend that we envision only getting worse in the years to come. Infrastructures are old and are in need of renovation in most cases. Even worse, the company does not have the cash on hand to pay for the upkeep and will be forced to look to outside financiers. We are concerned that the capital constraints will limit share-net growth out to late decade. Meanwhile, the dividend payout is no longer anything to entice investors. Andre J. Costanza January 26, 2007

(A) Primary earnings. Excludes nonrecurring gains: '91, 73¢; '92, 13¢; '04, 14¢; '05, 25¢; '06, 6¢. Quarterly earnings may not sum due to change in share count. Next earnings report

due early February.
(B) Dividends historically paid in early March, June, September, December. ■ Div'd reinvestment plan available.

(C) In millions, adjusted for splits.

Company's Financial Strength
Stock's Price Stability
75
Price Growth Persistence
Earnings Predictability
60



BUSINESS: California Water Service Group provides regulated and nonregulated water service to over 2 million people (456,700 customers) in 75 communities in California, Washington, and New Mexico. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired National Utility Company (5/04); Rio Grande Corp.

(11/00). Revenue breakdown, '05: residential, 69%; business, 18%; public authorities, 5%; industrial, 4%; other, 4%. '05 reported deprec. rate: 3.6%. Has about 840 employees. Chairman: Robert W. Foy. President & CEO: Peter C. Nelson. Inc.: Delaware. Address: 1720 North First Street, San Jose, California 95112-4598. Telephone: 408-367-8200. Internet: www.calwater.com.

3.0% 2.5% 2.0% -.5% 3.0% 4.0% Revenues "Cash Flow" .5% 1.5% -4.0% 4.5% 1.0% balance Dividends **Book Value** 2.5% 5.0% QUARTERLY REVENUES (\$ mill.) Cal-Full Mar.31 Jun.30 Sep.30 Dec.31 endar 2003 277.1 68.0 88.2 60.2 88.9 97.1 315.6 2004 69.4 2005 60.3 81.5 101.1 77.8 320.7 2006 107.8 335 2007 70.0 90.0 115 85.0 360 EARNINGS PER SHARE A E Cal-Full endar Mar.31 Jun.30 Sep.30 Dec.31 Year 2003 d.05 1.21 2004 .08 .59 .59 .20 1.46 2005 .03 .41 .71 .32 1.47 2006 .04 .31 .68 .29 1.32 .07 .41 2007 .73 QUARTERLY DIVIDENDS PAID B = Cal-Full Mar.31 Jun.30 Sep.30 Dec.31 endar

.281

.283

.285

.2875

1.12

1.13

1.14

1.15

37.1 2.9

97.2

375%

19.8

57.2

338%

Past

10 Yrs.

36.1

39.6

76.8

Past Est'd '03-'05

to '09-'11

361%

5 Yrs.

The regulatory environment is looking up for California Water Service **Group.** The state public utilities commission, which is in charge of maintaining a between consumers California-based utilities, appears to have turned the corner, handing down far more favorable and timely rulings in recent years. In fact, it recently granted eight of the company's 24 districts \$4.9 million in annual revenues. The award, which implies a 10.16% return on equity, points to an improving regulatory backdrop in California, where CWT does most of its business. This is very important because the company submits a general rate case to recover higher non-operational costs for eight of its districts every three years. Meanwhile, the Washington Utilities and Transportation Commission approved a 17% rate increase for the company's subsidiary, Washington-based which ought to add more than \$1 million to annual revenues.

Still, higher infrastructure costs will likely remain a thorn in the company's side. Although sales improved 7% in the third quarter, earnings declined 4%.

Operating costs increased due to higher water-production expenses and increased maintenance costs. The latter is a major point of concern heading forward, as many of the company's wells and systems are old and in need of considerable renovations. We suspect that infrastructure costs will continue to rise and pressure profit margins. That said, earnings, which probably declined in the fourth quarter of 2006 (results have yet to be released as of the time of this report), will likely remain uninspiring throughout most of 2007, despite more favorable comparisons.

These shares are an unexciting investment option. They are ranked 5 (Lowest) for Timeliness and are likely to trail the broader market indices for the coming six to 12 months. Meanwhile, they are already trading above our 2009-2011 Target Price Range and offer limited 3- to 5-year appreciation due to the capital constraints that we envision. Although its dividend yield has historically been the issue's main selling point, such is no longer really the case. There are better income vehicles out there at this juncture.

Andre J. Costanza

January 26, 2007

(A) Basic EPS. Excl. nonrecurring gain (loss): '00, (7¢); '01, 4¢; 02, 8¢. Next earnings report due late April

.281

.283

.285

.2875

.281

.283

.285

.2875

Accts Payable Debt Due

Current Liab.

Fix. Chg. Cov

of change (per sh)

ANNUAL RATES

Other

2003

2004

2005

2006

.281

.283

.285

.2875

(B) Dividends historically paid in mid-Feb., May, Aug., and Nov. ■ Div'd reinvestment plan

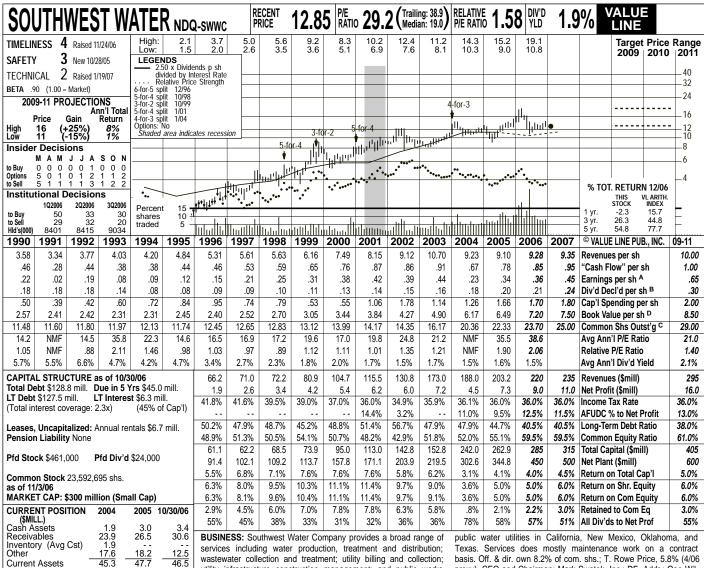
(C) Incl. deferred charges. In '05: \$63.9 mill., \$3.47/sh.

(D) In millions, adjusted for split.

(E) May not total due to change in shares.

Company's Financial Strength 8++
Stock's Price Stability 80
Price Growth Persistence 85
Earnings Predictability 70

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wastewater collection and treatment; utility billing and collection; utility infrastructure construction management; and public works services. It operates out of two groups, Utility (39% of 2005 revenues) and Services (61%). Utility owns and manages rate-regulated

basis. Off. & dir. own 8.2% of com. shs.; T. Rowe Price, 5.8% (4/06 proxy). CEO and Chairman: Mark Swatek. Inc.: DE. Addr.: One Wilshire Building, 624 S. Grand Ave. Ste. 2900, Los Angeles, CA 90017. Tel.: 213-929-1800. Internet: www.swwc.com

Past Past Est'd '03-'05 ANNUAL RATES 5 Yrs. of change (per sh) to '09-'11 8.5% 3.5% 1.5% Revenues "Cash Flow" 8.5% 7.0% 1.0% 5.0% Earnings 13.5% 11 0% 6.0% 9.5% 10.0% 14.0% 9.0% 6.0% Dividends Book Value

45.3

12.3 3.4

35.7

10.0

40.6

9.5

8.8 1.3

34.4

Current Assets

Accts Payable Debt Due

Current Liab.

Cal- endar			VENUES (\$ Sep. 30		Full Year
2003	36.1	41.5	51.4	44.0	173.0
2004	39.8	45.7	55.0	47.5	188.0
2005	45.2	51.3	54.7	52.0	203.2
2006	50.8	55.4	60.1	53.7	220
2007	55.0	60.0	65.0	55.0	235
Cal-	EA	RNINGS P	ER SHARE	Α	Full
endar	Mar.31	Jun. 30	Sep. 30	Dec. 31	Year
2003	d.01	.13	.21	.11	.44
2004		.13	.12	d.02	.23
2005	d.01	.15	.14	.06	.34
2006	.03	.08	.16	.09	.36
2007	.04	.15	.16	.10	.45
Cal-	QUAR	TERLY DI\	/IDENDS P	AID B	Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2003	.042	.042	.042	.046	.17
2004	.046	.046	.046	.050	.19
2005	.048	.048	.048	.052	.20
2006	.052	.052	.052	.058	.21
2007					
	ı				

Southwest Water's Utility Group and Services Group each had increased revenues for the nine months ending 2006. Consumption rose due to warm temperatures, and rate increases went into effect in 2006 in California, where SWWC's utility with the most customer connections is located. The 2005 acquisition of an Alabama wastewater facility also added to revenues.

The Services Group continues its efforts to increase the number of contracts in its operations portfolio. High population growth areas give SWWC the opportunity to provide additional services to clients to enhance the value of the contract. Higher billing rates will fuel organic revenue growth.

Cash for capital expenditures is generated by operations, debt financing, and credit lines. Rate increases in Southwest Water's operating territories will compensate for projected expense increases. A 12-month time lag from time of filing to rate change can occur while a state commission examines the general rate case. Southwest Water is strategically positioned to form partnerships

with the cities and communities as their service provider to meet essential water and wastewater needs. Deteriorating infrastructure and increasing regulatory complexity provide the opportunity for SWWC to obtain operating contracts. In the past, some of these operating relationships have led to SWWC acquiring the local Utility for which it had a service contract to operate. Acquisitions extend the company's presence in geographic regions. An area that is developing new housing and commercial space will lead to new utility connections.

We predict earnings will rise to \$0.45 in 2007. This would be up sharply from the estimated 2006 tally. Southwest Water is predicting annual customer growth of 8%. We expect a dividend increase, since the payout ratio is low enough to accommodate it.

The untimely stock's yield is low, by standards. Dividend growth utility potential over the next 3 to 5 years is very good, which should produce at least an average total return (for a utility) over that time.

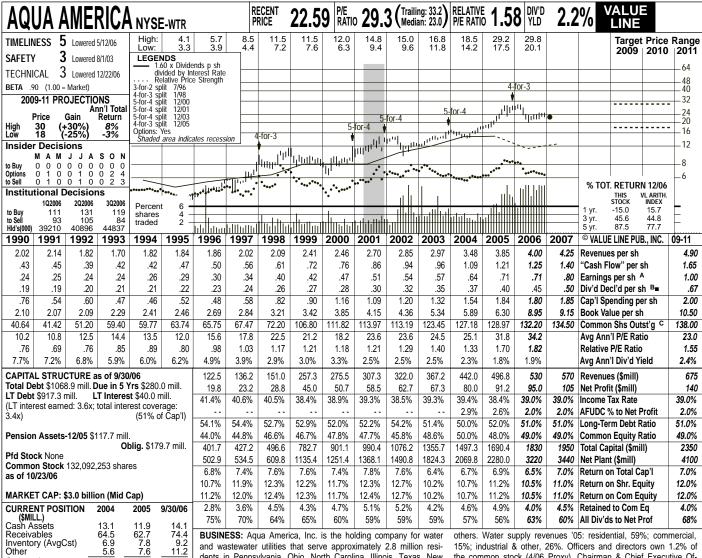
Enzo DiCostanzo

January 26, 2007

(A) Diluted earnings. Excludes nonrecurring gains (losses): '00, (3¢); '01, (5¢); '02, 1¢; '05, (23¢). Next earnings report due early March. (B) Dividends historically paid in late January,

April, July, and October. (C) In millions, adjusted for splits. (D) Includes intangibles. In 2005: \$35.9 million, \$1.61/share.

Company's Financial Strength Stock's Price Stability 60 Price Growth Persistence **Earnings Predictability** 55



**BUSINESS:** Aqua America, Inc. is the holding company for water and wastewater utilities that serve approximately 2.8 million residents in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Florida, Indiana, and five other states. Divested three of four non-water businesses in '91; telemarketing group in '93; and others. Acquired AquaSource, 7/03; Consumers Water, 4/99; and

others. Water supply revenues '05: residential, 59%; commercial, 15%; industrial & other, 26%. Officers and directors own 1.2% of the common stock (4/06 Proxy). Chairman & Chief Executive Officer: Nicholas DeBenedictis. Incorporated: Pennsylvania. Address: 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010. Telephone: 610-525-1400. Internet: www.aquaamerica.com.

# ANNUAL RATES of change (per sh) Past 10 Yrs. Past 5 Yrs. to '09-10 to '0

90.1

23.5 135.3

217.4

364%

90.0

55.5 163.1

263.3

377%

11.0%

108.9

34.3 151.6 72.0

257.9

280%

10.0%

Current Assets

Accts Payable Debt Due

Current Liab.

Fix. Chg. Cov.

Book Value

Cal- endar	QUAR Mar.31		VENUES ( Sep.30		Full Year
2003	80.5	83.4	102.1	101.2	367.2
2004	99.8	106.5	120.3	115.4	442.0
2005	114.0	123.1	136.8	122.9	496.8
2006	117.9	131.7	147	133.4	530
2007	120	150	160	140	570
Cal-	EA	RNINGS F	ER SHARI	ΕA	Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2003	.11	.14	.18	.14	.57
2004	.13	.14	.20	.17	.64
2005	.15	.17	.22	.17	.71
2006	.13	.17	.20	.21	.71
2007	.16	.20	.21	.23	.80
Cal-	QUAR	TERLY DIV	IDENDS P	AID B =	Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2003	.084	.084	.084	.09	.34
2004	.09	.09	.09	.098	.37
2005	.098	.098	.098	.108	.40
2006	.108	.108	.115	.115	.45
2007					

Agua America is in expansion mode.

Twenty-eight acquisitions of water and wastewater systems were made in eight states in 2006. The overall customer base increase of 7% was almost double what management expected. Operating revenues were up 6% for the first nine months of 2006, while profits dropped 7%. This stock is ranked 5, Lowest for Timeliness. Capital spending increased substantially through the first three quarters of 2006 and will likely keep rising for a while. WTR spent \$113 million on acquisitions in the first nine months of 2006. The goal is to achieve operating benefits from economies of scale and improve technological and overall management of acquired water systems in a stringent regulatory environment. In addition to traditional infrastructure and water-quality improvements, WTR is initiating the installation of radio frequency meter reading technology on customers' property to allow meter reading remotely.

**Earnings should begin to rise in 2007.** As the year gets under way, we should see the benefits of WTR's annexation of fragmented water systems. Integrating these

purchases into existing operations should enhance earnings. Acquired systems in Virginia, New York, New Jersey, and North Carolina expanded the customer base geographically. This reduces Aqua America's exposure to extreme and unusual weather conditions in a single area that affects water consumption. It also diversifies the company's regulatory base, an important consideration in assessing profit growth.

The stock is an average utility investment. There's room for modest price appreciation, based on our 3- to 5-year price target. With more than 50,000 independent water and 16,000 wastewater systems operating in the United States, WTR's growth through acquisitions offers good potential. Aqua America's numerous acquisitions over the last ten years have resulted in steady earnings and dividend growth. We expect this favorable trend to continue through 2009-2011. The customer base has increased 8% per year over the past five years. The payout ratio in the 60% neighborhood is near average for a water utility.

Enzo DiCostanzo

January 26, 2007

(A) Primary shares outstanding through '96; diluted thereafter. Excl. nonrec. gains (losses): '90, (38¢); '91, (34¢); '92, (38¢); '99, (11¢); '00, 2¢; '01, 2¢; '02, 5¢; '03, 4¢. Excl. gain from

disc. operations: '96, 2¢. Next earnings report due March. (B) Dividends historically paid in early March, June, Sept. & Dec. = Div'd. reinvestment plan available (5% discount).

(C) In millions, adjusted for stock splits.

Company's Financial Strength
Stock's Price Stability
Price Growth Persistence
Earnings Predictability

B+
Stock's Price Stability
85
Price Growth Persistence
95
Earnings Predictability



The Natural Gas (Distribution) Industry's Timeliness rank remains about where it was in December, though it has gained a few places in the last year. In 2006, the industry outperformed the Standard & Poor's 500 index, returning about 20%, including dividends, though the group's stock prices have generally moved little since our last report. Still, the estimated dividend yield for most of the issues is below last year's, since dividend increases have not kept pace with the stock price gains of 2006.

Natural gas distribution stocks usually offer dividends that are substantially above the Value Line Investment Survey median, currently 1.7%, but they also, as a group, have below-average capital appreciation potential. Indeed, some of the stocks are currently trading within their 2010-2012 target price ranges, leaving dividends as the only source of forecast investment return. That's because we believe that interest rates will likely be higher in the out years than at present, when the long-term Treasury bond rate has been below 5% for some time.

Regulated Earnings and Regulation.

Most of the gas distribution companies derive over 85% of their earnings from local natural gas distribution. Like their larger cousins, the electric power distribution companies, gas distribution companies are allowed by their state-based public service commissions to earn a limited return on equity, generally in the 10%-12% range. In a few cases, regulators allow gas utilities to earn performance-based rates of return on equity of up to 15\% and to share profits above that level with rate payers, provided the utility keeps rate growth at less than the general level of inflation. Other recent regulatory innovations include weather-adjusted rate mechanisms, which help the utility when weather is warmer than average and its customers when it's colder. Some states have gone a step further and have rules that "decouple" the utilities' revenues from gas usage to a certain extent in order not to discourage conservation. All told, the regulatory climate is better for the industry than ten years ago. That leaves volume as a main driver of earnings growth, and here, the group has wide variation. With natural gas consumption increasing about 1.5% a year, regulated earnings growth will likely be in the mid-single digits. The companies that appear to have

Composite Statistics: Natural Gas (Distribution)								
2003	2004	2005	2006	2007	2008		10-12	
29981	33220	41399	43500	44500	46500	Revenues (\$mill)	58000	
1395.3	1517.2	1788.8	1950	2050	2150	Net Profit (\$mill)	2800	
37.4%	35.7%	35.8%	36.0%	36.0%	36.0%	Income Tax Rate	36.0%	
4.7%	4.6%	4.3%	4.5%	4.6%	4.6%	Net Profit Margin	4.8%	
55.9%	53.2%	50.7%	51.0%	51.0%	51.0%	Long-Term Debt Ratio	52.0%	
43.7%	45.7%	48.3%	48.0%	48.0%	48.0%	Common Equity Ratio	46.0%	
28436	31268	33911	35400	36750	38000	Total Capital (\$mill)	42000	
31732	32053	35030	37000	39000	41000	Net Plant (\$mill)	45000	
6.4%	6.4%	6.9%	7.0%	7.0%	7.0%	Return on Total Cap'l	7.5%	
11.1%	10.4%	10.7%	11.0%	11.5%	11.5%	Return on Shr. Equity	12.0%	
11.2%	10.5%	10.8%	11.0%	11.5%	11.5%	Return on Com Equity	12.0%	
4.1%	4.0%	4.4%	5.0%	5.2%	5.3%	Retained to Com Eq	5.5%	
64%	63%	59%	61%	60%	60%	All Div'ds to Net Prof	60%	
14.1	15.6	16.2	16.5	Rold fir	gures are	Avg Ann'l P/E Ratio	13.0	
.80	.82	.87	.90	Valu	e Line	Relative P/E Ratio	.85	
4.5%	4.0%	3.6%	3.5%	estimates		Avg Ann'l Div'd Yield	4.6%	
314%	308%	331%	325%	325%	325%	Fixed Charge Coverage	325%	

## **INDUSTRY TIMELINESS: 81 (of 96)**

better prospects, such as *Northwest Natural Gas*, tend to have dividend yields that are lower than stocks facing slower growth, such as *Laclede*.

## **Nonregulated Activities**

In an effort to boost earnings, most gas distribution companies also have small, unregulated businesses. These tend to include heating, ventilation and air conditioning services (HVAC), gas marketing, and gas storage for off-system customers. The group also invests in gas pipelines, the returns of which are regulated by the FERC, rather than the states. As demand for gas grows, the U.S. will need to import substantially more gas in liquid form, and liquefied natural gas (LNG) plants could offer some of the companies investment opportunities, as well as the chance to raise earnings by moving more gas through their pipelines.

## **Earnings and Dividend Growth Prospects**

So far, customers seem to have handled recent high gas prices fairly well. Bad debt costs are up, but regulators are making allowances for that in some states, and gas price inflation will probably be less over the next two years than over the last two. Enlightened state regulation, combined with cost savings from measures like automated meter reading, will probably permit earnings to rise at a modest pace; dividends should follow suit.

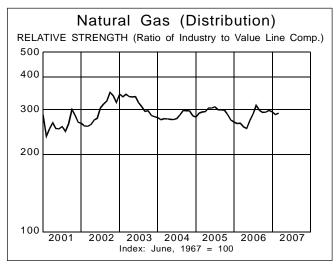
## Wheeling and Dealing

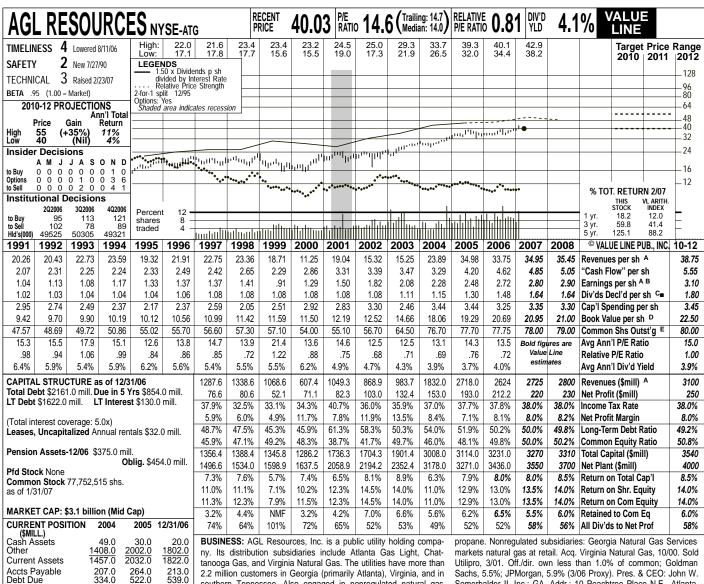
In the 1990s, many publicly held natural gas distributors were acquired, considerably reducing the variety of investment choices available. At present, three of the companies in our group are in the process of being acquired. While we don't encourage investors to bet on a company's being taken over, the possibility remains and could boost investment returns.

#### **Investment Considerations**

The Natural Gas (Distribution) Industry offers above-average dividends and, in some cases, some capital appreciation. Investors seeking relatively safe income can find prospects here, but dividend growth will likely be slow. Moreover, the industry is in fashion now; a change of investor sentiment unrelated to the industry's prospects or higher long-term interest rates could drive stock prices down.

Sigourney B. Romaine, CFA





2.2 million customers in Georgia (primarily Atlanta), Virginia, and in southern Tennessee. Also engaged in nonregulated natural gas marketing and other, allied services. Also wholesales and retails AGL Resources reported solid per-

formance for 2006. Revenues declined

slightly from the record top-line perform-

ance achieved in 2005, as a result of

reduced customer usage due to warmer

weather. Despite this, share earnings advanced by about 10%. This resulted from a

lower cost of gas, which decreased by almost 9%. The Wholesale Services business

also augmented AGL's bottom line, as op-

erating earnings for this segment in-

creased by 84%. For 2007, we anticipate a

modest advance in revenues and share earnings, assuming normal weather pat-

Sachs, 5.5%; JPMorgan, 5.9% (3/06 Proxy). Pres. & CEO: John W. Somerhalder II. Inc.: GA. Addr.: 10 Peachtree Place N.E., Atlanta, GA 30309. Tel.: 404-584-4000. Internet: www.aglresources.com

AGL Resources has announced plans

to build a natural gas storage facility

Fix. Chg. Cov 510% 442% 397% ANNUAL RATES Past Est'd '04-'06 Past to '10-'12 of change (per sh) 10 Yrs. 5 Yrs. 1.0% 5.0% 7.0% 7.0% 4.0% 5.5% Revenues "Cash Flow" 13.5% 3.5% 5.5% Dividends **Book Value** 5.5% 8.5% 2.5% Cal QUARTERLY REVENUES (\$ mill.) A Full

1477.0

1939.0

1627.0

Other

Current Liab.

1832
2718
2621
2725
2800
Full
Year
2.28
2.48
2.72
2.80
2.90
Full
Year
1.11
1.15
4 00
1.30
1.30

terns. Moderate growth should continue to the end of the decade. The first phase of the company's rate case in Tennessee has been resolved. In December, the company received approval from the Tennessee Regulatory Authority for its joint settlement with the other parties in the case, resulting in a rate increase of \$2.7 million, effective January 1, 2007. The second phase of this case will entail a review of the company's con-

servation and decoupling mechanisms. A final ruling on this matter is expected by the end of the third quarter.

in Beaumont, Texas. This initiative will require an investment of \$180 million and provide 12 billion cubic feet of capacity upon completion of the first phase. Construction should commence next year, with the facility becoming operational in 2010. The board of directors recently ap-

proved a dividend increase. quarterly payout is now \$0.41. represents a very healthy 10.8% rise over the previous level. This pattern is encouraging, although the payout may rise at a slower pace going forward, given AGL's declining cash balance.

This stock is ranked to lag the broader market for the coming six to 12 months. However, this issue may appeal to income investors, considering the healthy dividend yield. Also, this goodquality stock scores high marks for Safety and Price Stability. Nevertheless, at the current quotation, appreciation potential is below average for the pull to late decade, as the shares currently trade within our Target Price Range. Michael F. Napoli March 16, 2007

(A) Fiscal year ends December 31st. Ended September 30th prior to 2002.

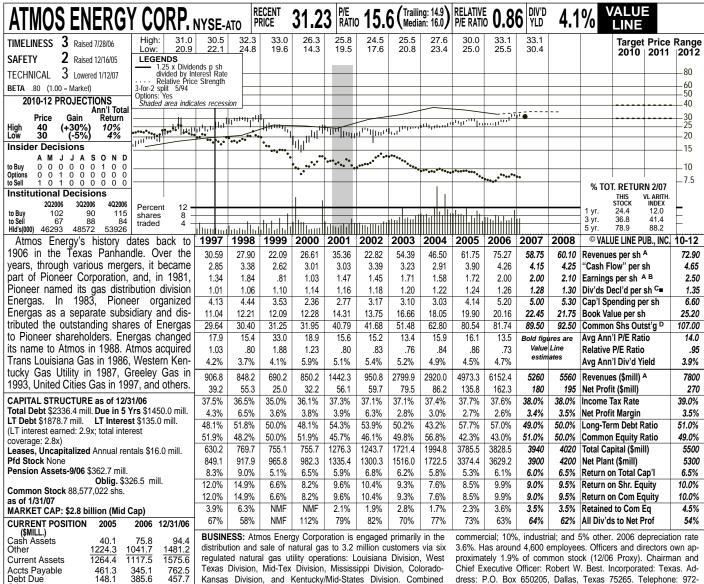
(B) Diluted earnings per share. Excl. nonrecur ring gains (losses): '95, (\$0.83); '99, \$0.39; '00, \$0.13; '01, \$0.13; '03, (\$0.07). Next earnings report due in May.

(C) Dividends historically paid early March, June, Sept, and Dec. ■ Div'd reinvest. plan available. **(D)** Includes intangibles. In 2006: \$420 million, \$5.40/share.

(E) In millions, adjusted for stock split.

Company's Financial Strength Stock's Price Stability B++ 95 Price Growth Persistence 70 **Earnings Predictability** 75

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Kansas Division, and Kentucky/Mid-States Division. Combined 2006 gas volumes: 272 MMcf. Breakdown: 53%, residential; 32%,

dress: P.O. Box 650205, Dallas, Texas 75265. Telephone: 972-934-9227. Internet: www.atmosenergy.com.

**ANNUAL RATES** Past Past Est'd '04-'06 of change (per sh) 10 Yrs. 7.5% 5 Yrs. 17.0% to '10-'12 2.5% Revenues 'Cash Flow" 4.0% 3.5% 3.0% 5.0% 10.0% 2.0% 3.5% Earnings 5.0% 1.5% Dividends 8.5% 4.0% Book Value Figori OHADTEDI V DEVENUES /5 mill \ A

503.4

1112.8

395%

Other

Current Liab.

Fix. Chg. Cov.

388.5

1119.2

408%

407.3

1627.5

420%

Fiscal Year		TERLY REV			Full   Fiscal
Ends	Dec.31	Mar.31	Jun.30	Sep.30	Year
2004	763.6	1117.5	546.1	492.8	2920.0
2005	1371.0	1687.8	909.9	1004.6	4973.3
2006	2283.8	2033.8	863.2	971.6	6152.4
2007	1602.6	1800	900	957.4	5260
2008	1390	1390	1390	1390	5560
Fiscal	EAR	NINGS PE	R SHARE	ABE	_Full .
Year Ends	Dec.31	Mar.31	Jun.30	Sep.30	Fiscal Year
2004	.57	1.12	.09	d.11	1.58
2005	.79	1.11	.06	d.21	1.72
2006	.88	1.10	d.22	.25	2.00
2007	.97	1.15	d.03	d.09	2.00
2008	.95	1.15	.08	d.08	2.10
Cal-	QUAR	TERLY DI\	/IDENDS F	AID C=	Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2003	.30	.30	.30	.305	1.21
2004	.305	.305	.305	.31	1.23
2005	.31	.31	.31	.315	1.25
2006	.315	.315	.315	.32	1.27
2007	.32				

Atmos Energy got off to a good start in fiscal 2007 (ends September 30th), driven by its non-utility businesses. Profits for the core natural gas marketing segment were boosted by higher unrealized storage mark-to-market gains, and underlying business trends were solid, as well. The pipeline operation reaped the benefits of the North Side Loop and other projects completed last year, plus rate adjustments arising from filings under the Gas Reliability Infrastructure Program (authorizing companies to earn a rate of return on their incremental annual capital investments).

But full-year earnings per share could be flat. The utility unit may be weighed down a bit by increased operating expenses, reflecting costs from a higher employee headcount. (Weather-normalization mechanisms applicable to around 90% of the customer base ought to help here, though.) Moreover, the fourth-quarter comparison ought to be quite difficult, given that our fiscal 2006 figure excludes an \$0.18-a-share charge for the impairment of irrigation properties in the West Texas Division. Lastly, the recent public

offering of 6.3 million common shares is estimated to dilute share net by around a nickel. (The \$192 million in net proceeds from that transaction were used to reduce short-term debt.) Atmos is gradually strengthening its capital structure following the issuance of debt to finance the acquisition of TXU's gas business.

The company is awaiting the results of several rate cases. The largest one seeks \$60 million in additional annual revenues in Texas, which would affect some 1.5 million customers. There is also a filing in Kentucky for a \$10.4 million annual revenue increase (175,000 customers) and Missouri for \$3.4 million in additional annual revenues (60,000 customers). Note that our presentation will account for the aforementioned amounts if the measures are approved.

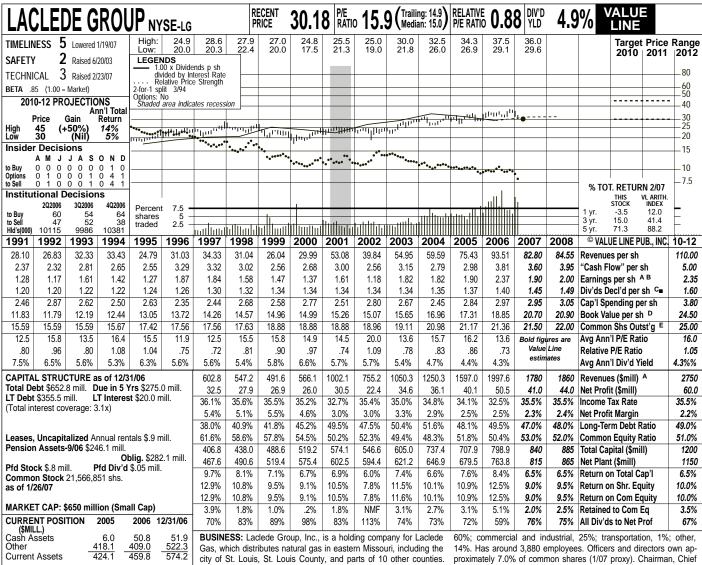
These good-quality shares offer a decent yield, a well-covered payout, and moderate dividend growth. But performance wise, they are already trading within our 3- to 5-year Target Price Range, and are ranked only 3 (Average) for Timeliness

(A) Fiscal year ends Sept. 30th. (B) Diluted in early March, June, Sept., and Dec. Div. (E) Qtrs may not add due to change in shrs shrs. Excl. nonrec. items: '97, d53¢; '99, d23¢; '00, 12¢; '03, d17¢; '06, d18¢. Next egs. rpt. due early May. (C) Dividends historically paid (D) In millions, adjusted for stock splits.

reinvestment plan. Direct stock purchase plan avail.

outstanding. **(F)** ATO completed United Cities merger 7/97.

March 16, 2007 Frederick L. Harris, III Company's Financial Strength Stock's Price Stability Price Growth Persistence 100 35 Earnings Predictability



Has roughly 631,000 customers. Purchased SM&P for approximately \$43 million (1/02). Therms sold and transported in fiscal 2006: 1.02 mill. Revenue mix for regulated operations: residential,

Laclede Group's share earnings took a

dive in the first quarter of fiscal 2007,

which ends September 30th. But we

were not surprised because of the difficult

comparison. For one thing, the perform-

ance of Laclede Energy Resources was not

as strong as the prior-year period, when margins were substantially higher as the

result of supply/demand imbalances aris-

ing from the 2005 Gulf Coast hurricanes

(one of the busiest storm seasons on record). Furthermore, Laclede Gas Company, accounting for the biggest portion of reve-

Executive Officer, and President: Douglas H. Yaeger. Incorporated: Missouri. Address: 720 Olive Street, St. Louis, Missouri 63101. Telephone: 314-342-0500. Internet: www.lacledegas.com.

tional. Annual growth in the customer

base for the natural gas distribution unit

has been sluggish for some time. That's

because the market in eastern Missouri is

in a mature phase. As such, any substan-

tial gains will have to be derived from the

unregulated businesses or from major ac-

quisitions, scenarios we don't see happen-

ing anytime soon. Consequently, annual

earnings-per-share increases may only be in the mid-single-digit range out to 2010-

Income-oriented accounts should find

the dividend yield of interest. (Note

that the quarterly distribution just rose by

3%.) Future hikes in the payout will likely

continue to be moderate, given that the

regulated subsidiary operates in a slow-

These shares have lost some ground

in recent months, attributable largely, it seems, to the company's substantially

lower results in the first quarter. The diminished price and earnings momentum

has caused the Timeliness rank to be 5

(Lowest). Total-return potential over the 3-

to 5-year horizon is limited, as well.

Fix. Chg. Cov. **ANNUAL RATES** Past Est'd '04-'06 Past 5 Yrs. 16.0% 3.0% 6.5% 10 Yrs. of change (per sh) to '10-'12 5.5% 7.0% 2.0% 10.0% Revenues "Cash Flow" 1.0% 3.0% Earnings Dividends Book Value 1.0% 3.0% 2.5% 5.0%

138.4

116.5

365.6

293%

103.3

207.5 120.1

430.9

285%

Accts Pavable

Current Liab.

Debt Due Other

Fiscal Year Ends	QUART Dec.31	TERLY REV Mar.31	/ENUES (\$ Jun.30	mill.) <sup>A</sup> Sep.30	Full Fiscal Year
2004	332.6	475.0	245.1	197.6	1250.3
2005	442.5	576.5	311.3	266.7	1597.0
2006	689.2	708.8	330.6	269.0	1997.6
2007	539.6	650	340	250.4	1780
2008	465	465	465	465	1860
Fiscal	EARI	NINGS PEI	R SHARE	ABF	_Full .
Year Ends	Dec.31	Mar.31	Jun.30	Sep.30	Fiscal Year
2004	.87	1.12	.19	d.28	1.82
2005	.79	1.06	.29	d.24	1.90
2006	1.23	1.05	.13	d.04	2.37
2007	.89	.99	.15	d.13	1.90
2008	1.03	1.07	.20	d.30	2.00
Cal-	QUART	ERLY DIV	IDENDS PA	/ID c∎	Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2003	.335	.335	.335	.335	1.34
2004	.335	.34	.34	.34	1.36
2005	.34	.345	.345	.345	1.38
2006	.345	.355	.355	.355	1.41
2007	.365				

nues, suffered from heightened operation and maintenance expenses and decreased income from entities outside the service territory. Lastly, SM&P Utility Resources posted a loss primarily because of costs incurred from expansionary initiatives, although its longer-term performance should benefit nicely. At this point in time, it appears the company's bottom line may plummet roughly 20%, to \$1.90 a share, in fiscal 2007. Share net may perk up a bit next year, assuming that the comparison will be easier. The company's prospects for the coming three to five years look unexcep-

150.0

297.3 115.0

562.3

290%

**(C)** Dividends historically paid in early January, April, July, and October. ■ Dividend reinvest-

ment plan available. (D) Incl. deferred charges. In '06: \$256.8 mill., shares outstanding.

\$12.02/sh

(E) In millions. Adjusted for stock split.
(F) Qtly. egs. may not sum due to change in

Frederick L. Harris, III

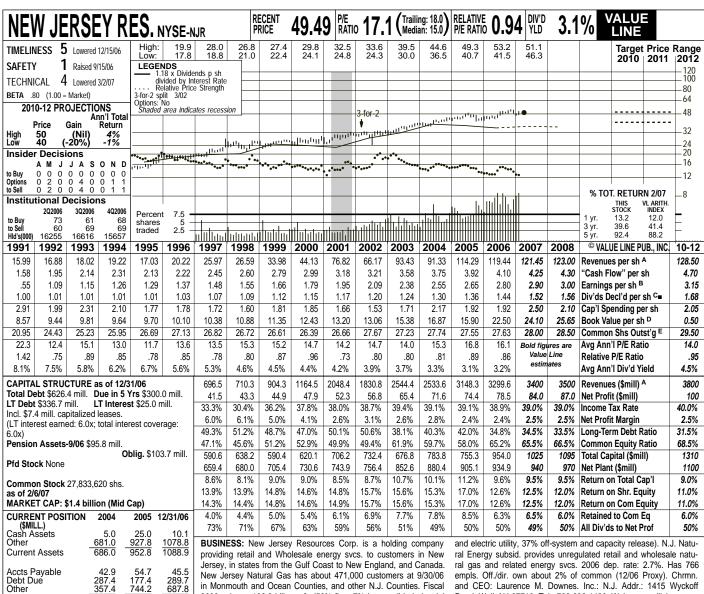
growth environment.

Company's Financial Strength Stock's Price Stability B+ 95 Price Growth Persistence 60 **Earnings Predictability** 65

(A) Fiscal year ends Sept. 30th. (B) Based on average shares outstanding thru. '97, then diluted. Excludes nonrecurring loss: '06, 7¢. Next earnings report due late April.

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March 16, 2007



in Monmouth and Ocean Counties, and other N.J. Counties. Fiscal 2006 volume: 102.8 bill. cu. ft. (56% firm, 7% interruptible industrial

and CEO: Laurence M. Downes, Inc.: N.J. Addr.: 1415 Wyckoff Road, Wall, NJ 07719. Tel.: 732-938-1480. Web: www.njliving.com.

450% New Jersey Resources began fiscal Past Est'd '04-'06 2007 (ends September 30th) on a weak to '10-'12 note. First-quarter profits increased 7% in 2.5% 3.0% natural-gas-distribution segment (NJNG), but dropped 50% in the energy-2.5% 3.0% 8.0% services unit (NJRES) and dropped 40% in the retail business. Revenues declined in Full Fisca Year all three segments due to lower customer usage at NJNG and lower sales at NJRES, 2533.6 which was the result of lower natural gas 3148.3 prices and higher pipeline transportation 3299.6 costs due to infrastructure damage from 3400 regional hurricanes. 3500

Even so, we look for a modest increase for share earnings, both this year and next. NJNG added about 10,000 new customers per year in 2005 and 2006 through new housing agreements and customer conversions from other fuels. We anticipate this annual new customer growth rate trend will continue. According to the company, the customer growth rate should increase natural gas sales volume by 1.5 billion cubic feet annually over the next two years and add \$40 million in new utility revenues per year. Natural gas is being used in 95% of new construction due to its efficiency and reliability.

In late 2006, the Conservation Incentive Program (CIP) went into effect. NJNG's earnings and cash flows will be affected by this tariff. The CIP decouples the link between customer usage and the utility's profits. This feature will allow customers to conserve energy while addressing the company's utility profit margin variations due to weather and customer usage.

The wholesale energy services provider is on track to leverage its transportation and storage capacity to manage sales to its energy company customers. The portfolio maintains physical asset contracts across the North American continent and its varied weather areas. The portfolio's value increases when there are natural gas price differences in these different regions. In maintaining and trading this portfolio, we think that NJRES's customers will receive better pricing on these commodities.

We think this company will be able to register steady growth. Even so, the stock is untimely and is trading at the top of our 3- to 5- year price target.

Enzo DiCostanzo March 16. 2007

(A) Fiscal year ends Sept. 30th.
(B) Diluted earnings. Next earnings report due (C) Dividends historically paid in early January,

357.4

687.7

826%

Past

19.0%

6.0%

7.5%

3.0% 6.5%

QUARTERLY REVENUES (\$ mill.)

438.5

5443

536.1

688

585

.06

.07

d.14

d 05

d.04

.31

.325

.34

.36

Dec.31 Mar.31 Jun.30

1064

1090

**EARNINGS PER SHARE** 

Dec.31 Mar.31 Jun.30

1.82

1.84

2.14

2.20

2.03

Mar.31 Jun.30 Sep.30

.31

.325

.34

.36

QUARTERLY DIVIDENDS PAID C=

Current Liab

Fix. Chg. Cov.

ANNUAL RATES

643.0 1037

854.0 1065

741.5 1285

.87

.91

1.23

1 01

1.26

.31

.325

.34

36

.38

1164

1195

of change (per sh)

Revenues "Cash Flow"

Dividends Book Value

Earnings

**Fiscal** 

Year Ends

2004

2005

2006

2007

2008

Fiscal Year Ends

2004

2005

2006

2007

2008

Cal-

endar

2003

2004

2005

2006

2007

744 2

976.3

660%

16.0% 5.5% 8.0% 3.5% 8.5%

Sep.30

414.4

684 9

534.5

685 5

Sep.30

d.20

d.17

d.43

d 26

d.25

Dec.3

.31

.325

.34

.36

Full Fisca Year

2.65

2.80

2.90

3.00

Year

1.24

1.30

1.36

1.44

630

ΑВ

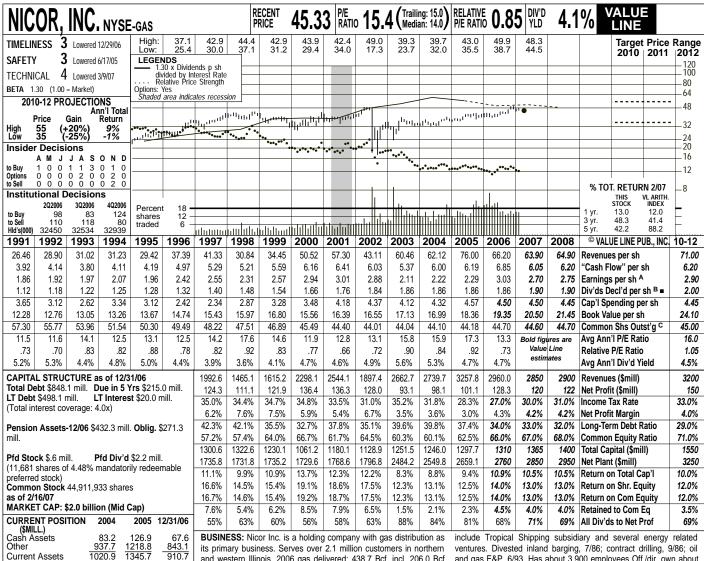
1023 0

April, July, and October. ■ Dividend reinvestment plan available.

(D) Includes regulatory assets in 2006: \$323.0 million, \$11.70/share.

(E) In millions, adjusted for split.

Company's Financial Strength Stock's Price Stability 100 Price Growth Persistence **Earnings Predictability** 95



its primary business. Serves over 2.1 million customers in northern and western Illinois. 2006 gas delivered: 438.7 Bcf, incl. 206.0 Bcf from transportation. 2006 gas sales (232.7 bcf): residential, 80%; commercial, 18%; industrial, 2%. Principal supplying pipelines: Natural Gas Pipeline, Horizon Pipeline, and TGPC. Current operations

ventures. Divested inland barging, 7/86; contract drilling, 9/86; oil and gas E&P, 6/93. Has about 3,900 employees Off./dir. own about 2.8% of common stock. (3/06 proxy). Chairman and CEO: Russ Strobel. Inc.: Illinois Address: 1844 Ferry Road, Naperville, Illinois 60563. Telephone: 630-305-9500. Internet: www.nicor.com.

Fix. Chg. Cov 428% 367% NMF Past Est'd '03-'05 ANNUAL RATES Past to '10-'12 of change (per sh) 10 Yrs. 5 Yrs. 8.0% 4.0% 11.5% 0.5% 1.0% Revenues "Cash Flow" 1.0% 4.0% Dividends Book Value 3.0% 1.5% 4.5%

502.9

490.2

1171.4

658.2

636.0

328.

1622.9

564.5 350.0

1142 4

Accts Payable Debt Due

Current Liab.

Other

Cal-		TERLY RE			Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2004	1115.7	429.5	299.9	894.6	2739.7
2005	1179.9	484.4	236.0	1357.5	3257.8
2006	1319.4	451.3	351.1	838.2	2960.0
2007	1200	400	250	1000	2850
2008	1100	450	300	1050	2900
Cal-	EA	RNINGS P	ER SHAR	ΕA	Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2004	.96	.44	d.26	1.08	2.22
2005	.98	.35	d.06	1.02	2.29
2006	.94	.41	.39	1.29	3.03
2007	1.00	.37	.28	1.05	2.70
2008	1.02	.35	.30	1.08	2.75
Cal-	QUART	TERLY DIV	IDENDS P	AID B ■	Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2003	.46	.465	.465	.465	1.86
2004	.465	.465	.465	.465	1.86
2005	.465	.465	.465	.465	1.86
2006	.465	.465	.465	.465	1.86
2007	.465				

Nicor finished 2006 with a strong performance on its bottom line. Despite unseasonably warm weather, the company reported about a 32% year-over-year increase in share net in 2006. The improvement was helped by a turnaround in wholesale natural gas marketing. Nicor's weather-related utility bill management program particularly had a strong finish, which also provided a boost to earnings. However, revenues were dragged down by a subpar performance in the gas distribution business, which was attributed to the warm winter.

The recent growth will likely slow for the remainder of 2007. Our current estimates call for sales and earnings to drop about 4% and 12%, respectively. Results are due to moderate as Nicor has derived much of the benefit from its moves, while the cost-cutting initiative will probably no longer fuel share-net gains.

Base rates will likely remain unchanged in the near term. The company does not have any rate cases currently awaiting approval by the Illinois Commerce Commission. Moreover, Nicor seems to have adjusted to conditions with rates at current levels for the near term.

We have introduced our 2008 estimates. We believe the company will begin to rebound from the potential slowdown in 2007 with slight increases in 2008. Therefore, we are estimating roughly 2% growth in both revenues and earnings for next year.

Nicor offers a healthy dividend yield. The company currently offers a yield of 4.1%, which is above the industry average. Additionally, Nicor has paid a dividend for 212 consecutive quarters, which exhibits its commitment to the payout.

This issue is an average selection for the coming six- to 12 months. Moreover, these shares are currently trading within our 3- to 5-year Target Price Range, which limits the appeal of this stock for long-term investors. Nicor also has some exposure to the volatile natural gas commodity markets, which have the potential to weigh on the company's results in the coming years. All told, investors may want to look elsewhere until these shares develop more-attractive prospects.

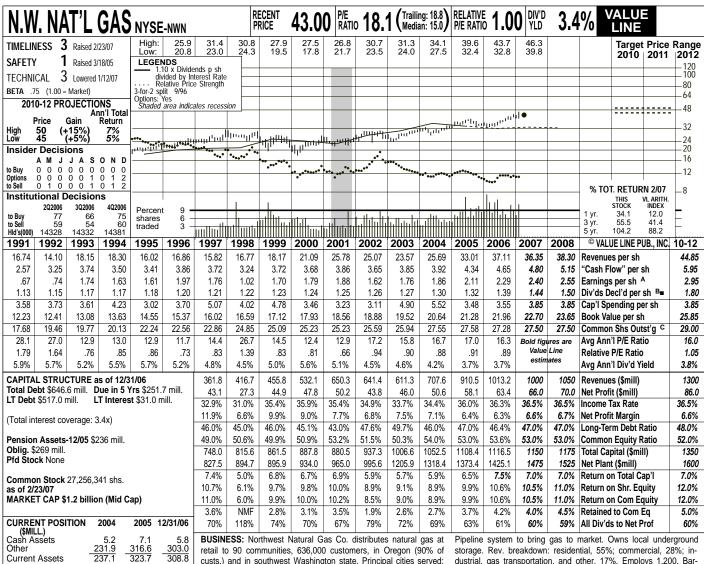
Richard Gallagher

March 16, 2007

(A) Based on primary earnings thru. '96, then diluted. Excl. nonrecurring gains/(loss): '89, 7¢; '97, 6¢; '98, 11¢; '99, 5¢; '00, (\$1,96); '01, 16¢; '03, (27¢); '04, (52¢); '05, 80¢; '06, (17¢). Excl. items from discontinued ops.: '93, 4¢; '96, 30¢. Quarterly earnings may not sum to total due to rounding. Next egs. report due early May.

May, August, November. ■ Dividend reinvestment plan available.(C) In millions. (B) Dividends historically paid early February,

Company's Financial Strength Stock's Price Stability 50 Price Growth Persistence 40 **Earnings Predictability** 80



BUSINESS: Northwest Natural Gas Co. distributes natural gas at retail to 90 communities, 636,000 customers, in Oregon (90% of custs.) and in southwest Washington state. Principal cities served: Portland and Eugene, OR; Vancouver, WA. Service area population: 2.4 mill. (77% in OR). Company buys gas supply from Canadian and U.S. producers; has transportation rights on Northwest

Pipeline system to bring gas to market. Owns local underground storage. Rev. breakdown: residential, 55%; commercial, 28%; industrial, gas transportation, and other, 17%. Employs 1,200. Barclays owns 6.2% of shares; insiders, 1% (4/06 proxy). CEO: Mark S. Dodson. Inc.: OR. Address: 220 NW 2nd Ave., Portland, OR 97209. Tel.: 503-226-4211. Internet: www.nwnatural.com.

316% 340% 349% Fx. Chg. Cov. ANNUAL RATES Past Past Est'd '03-'05 to '10-'12 of change (per sh) 10 Yrs. 5 Yrs. 8.0% 2.5% 5.0% 1.0% 4.5% 1.5% 11.0% 4.5% Revenues "Cash Flow" Earnings Dividends 1.5% 1.0% 7.0% **Book Value** 4.0% 3.5% 3.5%

102.5 117.5

267.3

135.3 134.7

326.6

113.6 129.6

341.5

Accts Payable Debt Due

Current Liab.

Other

Cal-	QUAR	Full			
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2004	254.5	109.7	81.4	262.0	707.6
2005	308.7	153.7	106.7	341.4	910.5
2006	390.4	171.0	114.9	336.9	1013.2
2007	380	170	110	340	1000
2008	390	180	120	360	1050
Cal-	EA	RNINGS P	ER SHARI	Α	Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2004	1.24	d.03	d.30	.95	1.86
2005	1.44	.04	d.31	.94	2.11
2006	1.48	.07	d.35	1.09	2.29
2007	1.56	.06	d.33	1.11	2.40
2008	1.64	.07	d.33	1.17	2.55
Cal-	QUAR	TERLY DIV	IDENDS PA	AID B =	Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2003	.315	.315	.315	.325	1.27
2004	.325	.325	.325	.325	1.30
2005	.325	.325	.325	.345	1.32
2006	.345	.345	.345	.355	1.39
2007	.355				

posted solid Northwest earnings growth in the last quarter of 2006 ... The prior-year period suffered from about \$0.06 a share in unususal litigation expenses. Still, fourth-quarter earnings rose around 9%, excluding the prior-year period charge. Northwest's customer count continued to grow at a 3% clip, about twice the industry average. Operation and maintenance costs declined 1%, after severance costs, as the company's work reorganization plan started to take effect. In 2006, the company earned \$2.22 a share, before severance costs and mark-tomarket accounting for derivatives (\$2.29 a share overall).

... and the momentum will likely continue through at least 2008. For 20 years, Northwest has logged about twice the average industry customer growth, and we see no reason why that won't continue for the foreseeable future. Natural gas came to the Portland area rather late, in the 1950s, giving Northwest ample conversion opportunities. And the company has over a 90% share of new residential heating. We anticipate further gains on the cost side, too, as Northwest completes

its work reorganization. This plan entails outsourcing most new construction and some administrative work, and standardizing and centralizing some functions. The company also plans to set up a new salesforce for the conversion market.

Suburban growth and other projects should keep earnings growing at a better-than average industry pace. Over the next 10 years, the Portland metro government will move its urban growth boundary out to the southeast of the city, opening a large new territory for natural gas service. Planners forecast that some towns in this area will grow by over 500% by 2015 with new, higher-density zoning. A new interstate pipeline project could also put to work over \$100 million of capital, at a good, FERC-regulated rate of return, and NWN will probably benefit from the construction of at least one new liquefied natural gas terminal in its area.

These neutrally ranked, top-quality shares have below average total-return potential. Earnings and dividends will likely grow faster than industry averages, but the current yield is modest. Sigourney B. Romaine March 16, 2007

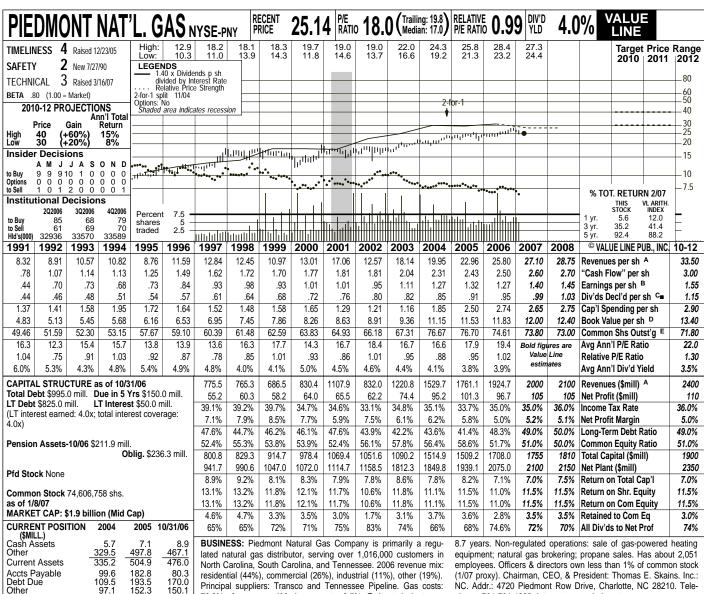
(A) Diluted earnings per share. Excludes nonrecurring gain: '98, \$0.15; '00, \$0.11. Next earnings report due early May. (B) Dividends historically paid in mid-February,

mid-May, mid-August, and mid-November.

Div'd reinvestment plan available.

(C) In millions, adjusted for stock split.

Company's Financial Strength A Stock's Price Stability 100 Price Growth Persistence 55 Earnings Predictability 80



72.8% of revenues. '06 deprec. rate: 3.5%. Estimated plant age: expect Piedmont Natural Gas'

earnings for the first quarter of fiscal

2007 (ends October 31st) to rise by

phone: 704-731-4226. Internet: www.piedmontng.com.

Fix. Chg. Cov 378% 400% 325% ANNUAL RATES Past Past Est'd '04-'06 to '10-'12 of change (per sh) 10 Yrs. 5 Yrs. 11.0% 5.5% 5.0% 5.0% 7.5% 7.0% 5.5% 3.0% Revenues "Cash Flow" Earnings Dividends 5.5% 5.5% 3.0% **Book Value** 6.5% 6.5% 2.5%

306.2

528.6

400.4

Current Liab.

Fiscal Year Ends	QUART Jan.31	ERLY REV Apr.30	/ENUES (\$ Jul.31	mill.) A Oct.31	Full Fiscal Year
2004	618.8	482.4	214.7	213.8	1529.7
2005	680.6	508.0	232.9	339.6	1761.1
2006	921.4	483.2	237.9	282.2	1924.7
2007	<b>900</b>	<b>550</b>	<b>250</b>	<b>300</b>	<b>2000</b>
2008	<b>925</b>	<b>575</b>	<b>275</b>	<b>325</b>	<b>2100</b>
Fiscal Year Ends	EARI Jan.31	NINGS PER Apr.30	R SHARE Jul.31	Oct.31	Full Fiscal Year
2004	1.03	.54	d.11	d.21	1.27
2005	.93	.52	d.06	d.07	1.32
2006	.94	.57	d.16	d.08	1.27
2007	<b>.96</b>	<b>.58</b>	<b>d.09</b>	<b>d.05</b>	1.40
2008	<b>.95</b>	<b>.60</b>	<b>d.06</b>	<b>d.04</b>	1.45
Cal-	QUART	TERLY DIV	IDENDS PA	AID C∎	Full
endar	Mar.31	Jun.30		Dec.31	Year
2003 2004 2005 2006 2007	.20 .208 .215 .23	.208 .215 .23 .24	.208 .215 .23 .24	.208 .215 .23 .24	.82 .85 .91 .95

(A) Fiscal year ends October 31st.
(B) Diluted earnings. Excl. extraordinary item:

00, 8¢. Excl. nonrecurring charge: '97, 2¢.

(C) Dividends historically paid mid-January,

April, July, October.

■ Div'd reinvest. plan available; 5% discount. **(D)** Includes deferred charges. At 10/31/05:

**\$0.02** a share. Customers continue to be added in Piedmont's North Carolina, South Carolina, and Tennessee service areas. In addition to South Carolina's increased large-volume customers, the 2006 Rate Stabilization Act filing was settled. Both of these factors should increase margins. We expect earnings for the full fiscal year to rise 10%, to \$1.40 a share. That's the midpoint of Piedmont's target of \$1.35-\$1.45. The Public Service Commission of

South Carolina approved a gas cost hedging plan for the purpose of cost stabilization. The plan targets 30% to 60% of annual normalized sales volumes. Any benefits recognized are deemed to be reductions in gas cost and are refunded to South Carolina customers in rates.

The capitalization ratios of 48% longterm debt and 52% common equity were both in the target ranges. Maintaining sufficient cash flows and achieving this capital structure will allow PNY to have an attractive credit rating,

\$4.0 million, 5¢/share.
(E) In millions, adjusted for stock splits.
(F) Quarters may not add to total due to

which will facilitate obtaining capital for future infrastructure expenditures.

Piedmont's joint venture is performing well. Piedmont Energy's 30% equity interest in SouthStar Energy services, a Georgia-based unregulated retail natural gas marketer, earned \$22.9 million of PNY's \$29.9 million overall joint venture pretax earnings in fiscal 2006. We expect similar results to continue due to growth in joint markets.

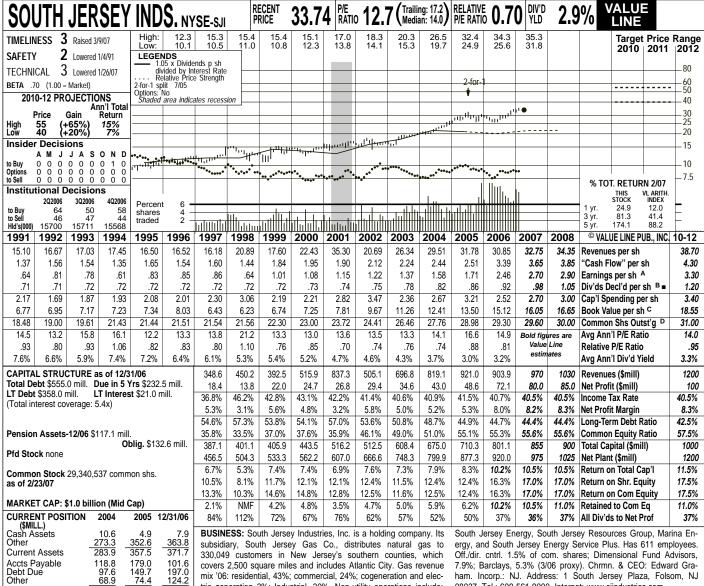
In the three-state service area of the Carolinas and Tennessee, the overall customer growth rate was 3.5% in 2006. The gas distribution system serves a million customers company-wide with an increase last year of a near record 34,400. The growth rate is among the highest in the nation for natural gas distribution companies. A record was set in 2006 for residential construction customer growth. Untimely Piedmont stock offers an at-

tractive yield. Investors should note that the company offers a 5% discount on dividend reinvestment. Good dividend growth over the next 3 to 5 - years should produce worthwhile total return over that time.

Enzo DiCostanzo March 16, 2007

Company's Financial Strength Stock's Price Stability B++ 100 Price Growth Persistence **Earnings Predictability** 80

Next earnings report due early May. change in shares outstanding. © 2007, Value Line Publishing, Inc. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. THE PUBLISHER IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, resold, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.



330,049 customers in New Jersey's southern counties, which covers 2,500 square miles and includes Atlantic City. Gas revenue mix '06: residential, 43%; commercial, 24%; cogeneration and electric generation 3%; Industrial, 30%. Non-utility operations include:

Off./dir. cntrl. 1.5% of com. shares; Dimensional Fund Advisors, 7.9%; Barclays, 5.3% (3/06 proxy). Chrmn. & CEO: Edward Graham. Incorp.: NJ. Address: 1 South Jersey Plaza, Folsom, NJ 08037. Tel.: 609-561-9000. Internet: www.sjindustries.com

Fix. Chg. Cov 426% 486% 527% ANNUAL RATES Past Est'd '04-'06 Past to '10-'12 of change (per sh) 10 Yrs. 5 Yrs. 5.5% 4.5% 7.5% 6.5% 4.0% 7.5% Revenues "Cash Flow" 8.0% 1.5% Dividends Book Value 5.5% 13.0% 5.0%

976

285.3

403.1

Other

Current Liab.

197 0

422.8

Cal- endar	QUAR Mar.31		VENUES ( Sep.30	\$ mill.) Dec.31	Full
endar	IVIAI.31	Juli.30	Sep.su	Dec.31	Year
2004	307.6	136.5	129.5	245.5	819.1
2005	328.6	154.0	157.0	281.4	921.0
2006	365.0	155.5	133.1	250.3	903.9
2007	375	170	155	270	970
2008	390	190	170	280	1030
Cal-	EA	RNINGS P	ER SHAR	A	Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2004	.91	.15	.02	.50	1.58
2005	.96	.27	.09	.39	1.71
2006	1.06	.20	.51	.69	2.46
2007	1.12	.30	.55	.73	2.70
2008	1.15	.35	.60	.80	2.90
Cal-	QUAR	IEKLY DIV	IDENDS P	AID □■	Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2003		.193	.193	.395	.78
2004		.202	.202	.415	.82
2005		.213	.213	.438	.86
2006		.225	.225	.470	.92
2007					'
•-	ı				1

South Jersey Industries has restated its earnings. In February, the company determined that its documentation of certain hedge transactions did not contain the specificity required by FASB 133. Therefore, the hedges did not qualify for hedge accounting treatment. As a result, SJI restated its financial statements for 2004, 2005, and the first three quarters of 2006. We have adjusted our 2006 figures accordingly. In keeping with Value Line convention, we have not restated figures from previous years.

The company's earnings per share advanced significantly in 2006. The Conservation Incentive Program (discussed below) boosted net income by \$4.6 million. The Wholesale Commodity Marketing business reported impressive bottom-line Marketing growth, as volatility in natural gas prices and increased storage capacity created lucrative opportunities. Pension and other postretirement benefit costs declined. Strong performance will probably continue, although mark-to-market accounting will make earnings more volatile.

The company has implemented its Conservation Incentive Program. This

initiative allows South Jersey Gas to promote energy conservation, while insulating the company from the negative impact of reduced customer usage (as a result of warmer weather, higher prices, or more efficient heating equipment).

Several projects at Marina Energy may benefit SJI in the coming years. Marina develops, owns, and operates onsite energy plants, which provide income streams as part of long-term contracts. It brought three projects on line during the second half of 2006. In addition, Marina has three projects scheduled to commence operations by early 2008.

The board of directors has increased the dividend by 9%. The board raised the quarterly payout from \$0.225 a share to \$0.245. SJI has increased its dividend at a solid clip in recent years and will probably continue to do so.

This stock is ranked to pace the broader market for the year ahead. At the current quotation, the yield is low (by utility standards), although the issue does have worthwhile total-return potential for the pull to late decade.

Michael F. Napoli March 16, 2007

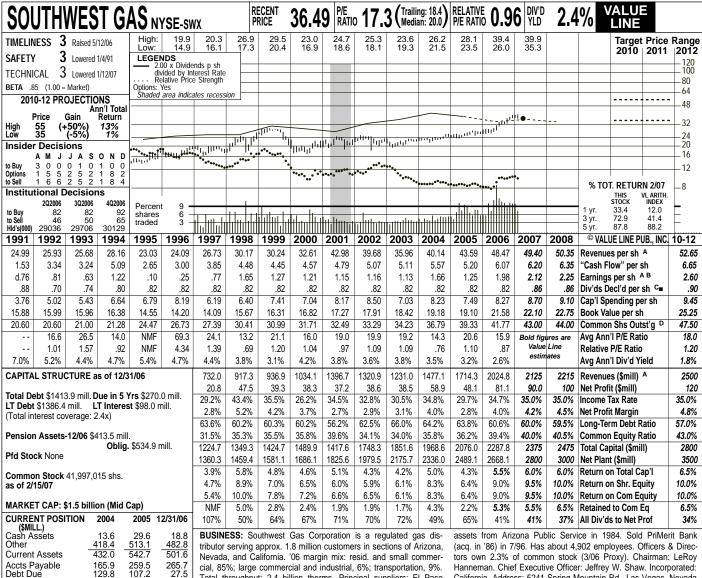
(A) Based on avg. shs. Excl. nonrecur. gain: '01, \$0.13. Excl gain (losses) from discont. ops.: '96, \$1.14; '97, (\$0.24); '98, (\$0.26); '99, (\$0.02); '00, (\$0.04); '01, (\$0.02); '02, (\$0.04);

'03, (\$0.09); '05, (\$0.02); '06, (\$0.02). Excl. gains due to acct'g change: '93, \$0.04; '01, \$0.14. Next egs. report due early May. (B) Dividends paid early Apr., Jul., Oct, and

late Dec. ■ Div. reinvest. plan avail. (2% disc.). (C) Incl. regulatory assets (\$197.0 mill.): at 12/31/06, \$6.72 per shr. (D) In millions, adjusted for split.

Company's Financial Strength Stock's Price Stability B++ 100 Price Growth Persistence **Earnings Predictability** 90

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cial, 85%; large commercial and industrial, 6%; transportation, 9%. Total throughput: 2.4 billion therms. Principal suppliers: El Paso Natural Gas Co. and Northwest Pipeline Corp. Acquired gas utility

Hanneman. Chief Executive Officer: Jeffrey W. Shaw. Incorporated: California. Address: 5241 Spring Mountain Rd., Las Vegas, Nevada 89193. Telephone: 702-876-7237. Internet: www.swgas.com.

Fix. Chg. Cov 166% 167% 220% Past Est'd '04-'06 ANNUAL RATES Past to '10-'12 of change (per sh) 10 Yrs. 5 Yrs. 4.5% 4.0% 5.0% 3.5% 3.0% 3.0% Revenues "Cash Flow" -0.5% 8.0% 1.5% Dividends Book Value 2.0% 3.0% 4.0%

483.0

621.0

496.1

Other

Current Liab.

Cal- endar	QUART Mar.31	Jun.30	/ENUES (\$ Sep.30		Full Year
2004 2005 2006	473.4 542.9 676.9	278.7 361.1 430.9	264.5 313.3 351.8	460.5 497.0 565.1	1477.1 1714.3 2024.8
2007 2008	700 725	460 480	380 400	585 610	2125 2215
Cal-			ER SHAR		Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2004	1.18	d.24	d.51	1.23	1.66
2005	.88	d.07	d.43	.87	1.25
2006	1.11	.02	d.26	1.11	1.98
2007	1.15	.05	d.20	1.12	2.12
2008	1.20	.05	d.15	1.15	2.25
Cal-	QUAR	TERLY DIV	IDENDS P	AID C■	Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2003	.205	.205	.205	.205	.82
2004	.205	.205	.205	.205	.82
2005	.205	.205	.205	.205	.82
2006	.205	.205	.205	.205	.82
2007	.205	.215			

Southwest Gas finished the year on a strong note. Revenues and share earnings advanced by roughly 14% and 28%, respectively, in the fourth quarter. For full-year 2006, the top line increased by 18%. Southwest Gas increased its customer base by 4% during the year. This augmented gross margin by \$26 million. Rate relief in California and Arizona added \$37 million more to margin. The company also benefited from closer-to-normal weather in the recent interim, compared to the warmer temperatures it had experienced in the same period of 2005. Earnings per share came in at \$1.98, well above the prior year's tally.

. We anticipate moderate growth in the **current year.** The company's focus on obtaining rate relief and improving rate design is encouraging, as Southwest Gas depends upon approved revenue increases to help it cope with higher costs. Customer growth should continue to benefit the company, as well. However, as Southwest Gas expands, it is likely to incur upfront costs and increased operating expenses. Improvements in technology may offset these costs somewhat.

The company recently announced a dividend increase. The June quarterly payout will now be \$0.215. As the first dividend increase in more than a decade, this move is refreshing. Still, income-oriented investors should note that the company's dividend yield of 2.4% remains lower than that of most utility stocks.

Investors should be aware of several caveats. The share count at Southwest Gas has risen steadily in recent years. This pattern appears likely to continue and may hinder growth in earnings per share. Also, long-term debt currently comprises over 60% of total capital. Debt should continue to increase, although probably at a slower pace than shareholders' equity. Warmer-than-normal weather or lagging rate relief could also hurt the company's revenues and earnings.

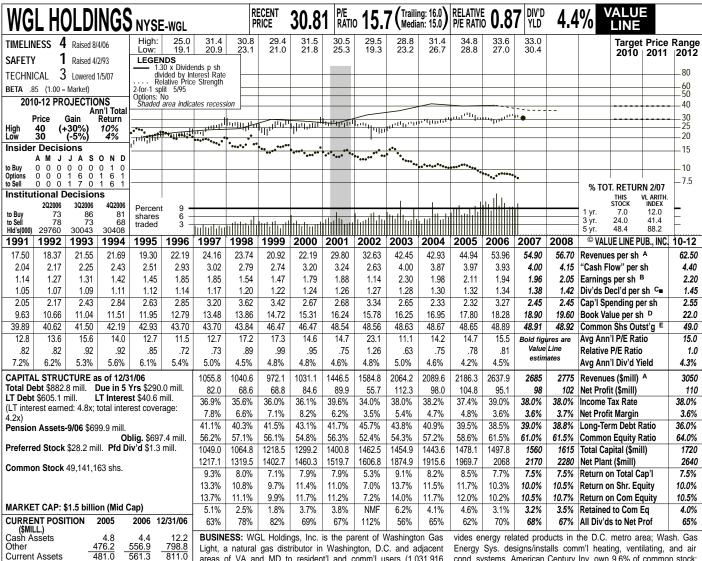
Shares of Southwest Gas are neutrally ranked for Timeliness. We anticipate steady bottom-line growth at SWX for the pull to late decade. Nonetheless, total return potential is unexciting for that timeframe, as the stock is currently trading within our Target Price Range. Michael F. Napoli March 16, 2007

(A) Incl. income for PriMerit Bank on the equity basis through 1994. (B) Based on avg. shares outstand. thru. '96, then diluted. Excl. nonrec. gains (losses): '93, 8¢; '97, 16¢; '02, (10¢); '05,

(11¢); '06, 7¢. Incl. asset writedown: '93, 44¢. Excl. loss from disc. ops.: '95, 75¢. Next egs. report due early May. **(C)** Dividends historically paid early March, June, September, December.

■ Div'd reinvest. plan avail. (D) In millions. (E) Quarterly figures may not sum due to

Company's Financial Strength Stock's Price Stability В 95 Price Growth Persistence 65 **Earnings Predictability** 65



areas of VA and MD to resident'l and comm'l users (1,031,916 meters). Hampshire Gas, a federally regulated sub., operates an underground gas-storage facility in WV. Non-regulated subs.: Wash. Gas Energy Svcs. sells and delivers natural gas and procond. systems. American Century Inv. own 9.6% of common stock; Off./dir. less than 1% (1/07 proxy). Chrmn. & CEO: J.H. DeGraffenreidt. Inc.: D.C. and VA. Addr.: 1100 H St., N.W., Washington, D.C. 20080. Tel.: 202-624-6410. Internet: www.wglholdings.com

Fix. Chg. Cov 460% 450% 450% ANNUAL RATES Past Est'd '04-'06 Past to '10-'12 of change (per sh) 10 Yrs. 5 Yrs. 7.5% 5.0% 4.0% 2.0% Revenues "Cash Flow" 6.5% Earnings Dividends 6.0% Book Value 4.0% 3.0% 3.0%

204.9 91.0

411.4

208.5 238.4

560.8

313.1 277.7

805.2

Accts Payable Debt Due

Current Liab.

Other

Fiscal Year Ends	QUART Dec.31	ERLY RE\ Mar.31	/ENUES (\$ Jun.30	mill.) <sup>A</sup> Sep.30	Full Fiscal Year
2004 2005 2006 2007	585.3 623.4 902.9 732.9	862.2 929.8 1064.5 <b>1095</b>	356.9 349.0 346.9 <b>440</b>	285.2 284.1 323.6 <b>417.1</b>	2089.6 2186.3 2637.9 <b>2685</b>
2008	970	1040	390	375	2775
Fiscal	EAF	RNINGS PE	ER SHARE	AB	Full
Year Ends	Dec.31	Mar.31	Jun.30	Sep.30	Fiscal Year
2004	.81	1.62	d.08	d.37	1.98
2005	.88	1.63	d.17	d.23	2.11
2006	.93	1.17	d.01	d.15	1.94
2007	.92	1.20	d.01	d.15	1.96
2008	.95	1.26	d.01	d.15	2.05
Cal-	QUART	TERLY DIV	IDENDS PA	AID c ■	Full
endar	Mar.31	Jun.30	Sep.30	Dec.31	Year
2003	.32	.325	.325	.325	1.30
2004	.325	.333	.333	.333	1.32
2005	.33	.33	.333	.333	1.33
2006 2007	.333 .34	.333	.338	.338	1.34

WGL Holdings, Inc.'s consolidated operating revenues were down 2% to \$733 million for the first three months of fiscal 2007. The biggest declines were in the regulated utility segment, where gas delivery revenues were down 30% due to warm weather and customer conservation. In addition the nonutility operation HVAC segment was down 60% owning to the completion of large projects for its customers at the end of fiscal 2006 that have not yet been replaced in the segment's revenue stream. The regulated utility segment is WGL's core business; it represents 91% of the holding company's total assets. Even so, corporate income increased 2% to \$45.1 million thanks to a 20% decrease in operating expenses.

Washington Gas is continuing to address the natural gas leaks in its dis-tribution system in Maryland. Gas used in the system from a liquefied natural gas terminal has a lower concentration of heavy hydrocarbons, that, when introduced into the overall distribution system, can cause the seals in the pipe couplings to leak. These gas service lines and couplings are being replaced and rehabilitated in the

distribution system. The project is expected to be completed by December, 2007 at an estimated cost of \$144 million. This project is necessary to provide safe and reliable utility service. It is anticipated that these costs will be recognized in the rate-making process. Washington Gas' fi-nancial condition, results of operations, and cash flows will, of course, be affected by the Public Service Commission Maryland's rate-making judgment.

WGL Holdings expects to benefit from robust economic growth in its service area. The DC market is one of the most prosperous in the United States. New customers have been added at an average of 20,000 per year for the last few years. And attention will be focused on residential customer conversions to natural gas from other forms of energy.

These shares are trading within our Target Price Range, and we see negligible price appreciation for the 3- to 5-years ahead. The stock stands out for its yield, however, which is one of the highest among the gas distribution companies. Moreover, finances are strong. Enzo DiCostanzo March 16, 2007

(A) Fiscal years end Sept. 30th.
(B) Based on diluted shares. Excludes nonrecurring losses: '01, (13¢); '02, (34¢); discontinued operations: '06, (15¢). Next earnings

report due late April. **(C)** Dividends historically paid early February, May, August, and November. **•** Dividend reinvestment plan available. **(E)** In millions, adjusted for stock split. (D) Includes deferred charges and intangibles.

Company's Financial Strength Stock's Price Stability 100 Price Growth Persistence 70 **Earnings Predictability** 60





AMER S	T WATER (NY	SE)			Scottrade <sup>-</sup>
AWR	39.70	<b>▼-</b> 0.77	(-1.90%)	Vol. 20,500	12:11 CST

American States is a public utility company engaged principally in thepurchase, production, distribution and sale of water. The company also distributes electricity in some communities. In the customer service areas for both water and electric, rates and operations are subject to the jurisdiction of the California Public Utilities Commission.

### **General Information**

AMER STATES WTR

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Industry

**UTIL-WATER** 

SPLY

Sector:

Utilities

Fiscal Year End

December

Last Reported Quarter

12/31/06

Next EPS Date

03/13/2007

## **Price and Volume Information**

Zacks Rank	12
Yesterday's Close	40.47
52 Week High	42.39
52 Week Low	33.33
Beta	0.25
20 Day Moving Average	53,824.55
Target Price Consensus	43



#### % Price Change

4 Week 12 Week

% Price Change Relative to S&P 500 7.13 4 Week

7.67 12 Week 4.74

YTD		4.27	YTD		-1.73
Share Information			Dividend Informa	tion	
Shares Outstanding		17.04	Dividend Yield		2.33%
(millions)		17.04	Annual Dividend		\$0.94
Market Capitalization (millions)		686.12	Payout Ratio		0.00
Short Ratio		11.93	Change in Payout		0.00
Last Split Date		06/10/2002	Last Dividend Payo	out / Amount 11/0	8/2006 / \$0.23
EPS Information				commendations	
Current Quarter EPS Consens	sus Estin		Current (1=Strong	Buy, 5=Strong Sell)	3.00
Current Year EPS Consensus	Estimat		30 Days Ago		3.00
Estimated Long-Term EPS Gr	owth Ra	te -	60 Days Ago		3.00
Next EPS Report Date		03/13/2007	90 Days Ago		3.00
Fundamental Ratios			,		
		EPS Growth		Sales Growth	
P/E Current FY Estimate:	25 17	vs. Previous Year	-8 51%	vs. Previous Year	8.33%
		vs. Previous Quart		vs. Previous Quarter	
Trailing 12 Months:	4.19	vs. Flevious Quali	lei 15.44 /0	vs. Frevious Quarter	. 10.0770
PEG Ratio	4.19				
Price Ratios		ROE		ROA	•
Price/Book	2.46	12/31/06		12/31/06	-
Price/Cash Flow		09/30/06	8.60		2.61
Price / Sales	-	06/30/06	9.00	06/30/06	2.74
Current Ratio		Quick Ratio		Operating Margin	
12/31/06	-	12/31/06	-	12/31/06	-
09/30/06	0.78	09/30/06	0.76	09/30/06	9.16
06/30/06	0.90	06/30/06	0.88	06/30/06	9.67
Net Margin		Pre-Tax Margin		Book Value	
12/31/06	-	12/31/06	-	12/31/06	-
09/30/06	19.12	09/30/06	19.12	09/30/06	16.38
06/30/06	20.30	06/30/06	20.30	06/30/06	16.31
Inventory Turnover		Debt-to-Equity		Debt to Captial	
12/31/06	_	12/31/06	_	12/31/06	_
09/30/06		09/30/06	0.96	09/30/06	49.09

06/30/06

59.09 06/30/06

0.98 06/30/06



CALIFO	RNIA WATE		Scottrade <sup>-</sup>		
CWT	40.89	<b>▼-</b> 0.61	(-1.47%)	Vol. 22,000	12:16 CST

California Water Service Company's business, which is carried on through its operating subsidiaries, consists of the production, purchase, storage, purification, distribution and sale of water for domestic, industrial, public and irrigation uses, and for fire protection. It also provides water related services under agreements with municipalities and other private companies. The nonregulated services include full water system operation, and billing and meter reading services.

#### General Information

CALIF WATER SVC

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Email: klichtenberg@calwater.com

Industry

**UTIL-WATER** 

SPLY

Sector:

Utilities

Fiscal Year End De Last Reported Quarter 12/ Next EPS Date 03/

December 12/31/06 03/01/2007

## **Price and Volume Information**

Zacks Rank	iz
Yesterday's Close	41.50
52 Week High	45.36
52 Week Low	33.72
Beta	0.62
20 Day Moving Average	74,656.00
Target Price Consensus	43

% Price Change

4 Week



% Price Change Relative to S&P 500

2.94 4 Week

		101			0.04
12 Week		1.24	12 Week		-2.64
YTD		1.44	YTD		-1.38
Share Information			Dividend Informa	ation	
Shares Outstanding		20.66	Dividend Yield		2.83%
(millions)			Annual Dividend		\$1.16
Market Capitalization (millions)		846.52	Payout Ratio		0.00
Short Ratio		6.10	Change in Payout	Ratio	0.00
Last Split Date		01/26/1998	Last Dividend Pay	out / Amount	11/02/2006 / \$0.29
		0 17201 1000			
<b>EPS Information</b>			Consensus Re	commendation	ns
Current Quarter EPS Conser	sus Estir	nate 0.27	Current (1=Strong	Buy, 5=Strong S	ell) 2.43
Current Year EPS Consensu	s Estimat	te 1.30	30 Days Ago		2.43
Estimated Long-Term EPS G	rowth Ra	te 9.70	60 Days Ago		2.00
Next EPS Report Date		03/01/2007	90 Days Ago		2.00
Fundamental Ratios					
P/E		EPS Growth		Sales Growth	
Current FY Estimate:	25.41			vs. Previous Ye	
Trailing 12 Months:	30.36	vs. Previous Quart	ter 119.35%	vs. Previous Qu	arter: 32.86%
PEG Ratio	2.63				
Price Ratios		ROE		ROA	
Price/Book	2.53	12/31/06	-	12/31/06	-
Price/Cash Flow	13.47	09/30/06	8.54	09/30/06	2.44
Price / Sales	-	06/30/06	8.73	06/30/06	2.54
Current Ratio		Quick Ratio		Operating Mar	rain
12/31/06	_	12/31/06	_	12/31/06	-
09/30/06	0.60	09/30/06	0.55	09/30/06	7.53
06/30/06	0.48	06/30/06	0.44	06/30/06	7.84
Not Mousin		Dec Terr Messie		Beek Velve	
Net Margin 12/31/06		Pre-Tax Margin 12/31/06	_	Book Value 12/31/06	
09/30/06	7.19	09/30/06	7.19	09/30/06	16.17
06/30/06		06/30/06	7.19		15.77
	1.53	00/30/00	7.53	06/30/06	
Inventory Turnover		Debt-to-Equity		Debt to Captia	al
12/31/06	-	12/31/06	-	12/31/06	-

09/30/06	54.56	09/30/06	0.99	09/30/06	49.36
06/30/06	53.80	06/30/06	0.94	06/30/06	48.53



# SOUTHWEST WATER COMPANY (NASDAQ)

Scottrade

SWWC

13.20

**v**-0.22

(-1.64%)

Vol. 28,720

12:22 CST

Southwest Water Company provides a broad range of utility and utility management services and serves people from coast to coast. Through its various subsidiaries, Southwest operates and manages water and wastewater treatment facilities along with providing utility submetering and billing and collection services.

#### **General Information**

SOUTHWEST WATER

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Industry

**UTIL-WATER** 

SPLY

Sector:

Utilities

Fiscal Year End

December

Last Reported Quarter

12/31/06

Next EPS Date

03/15/2007

## Price and Volume Information

Zacks Rank	Æ
Yesterday's Close	13.42
52 Week High	19.03
52 Week Low	10.85
Beta	0.51
20 Day Moving Average	108,326.25
Target Price Consensus	14

### % Price Change

4 Week



% Price Change Relative to S&P 500

7.76 4 Week

12 Week		2.30	12 Week		-1.61
YTD		-3.13	YTD		-6.10
Share Information			Dividend Informa	ation	
Shares Outstanding		23.59	Dividend Yield		1.73%
(millions)		20.00	Annual Dividend		\$0.23
Market Capitalization (millions)		314.49	Payout Ratio		0.00
Short Ratio		14.88	Change in Payout	Ratio	0.00
Last Split Date		12/27/2002	Last Dividend Pay	out / Amount	12/27/2006 / \$0.06
EPS Information			Consensus Re		
Current Quarter EPS Con-	sensus Estir	mate 0.08	Current (1=Strong	Buy, 5=Strong Se	ell) 2.33
Current Year EPS Conser	nsus Estimat	te 0.35	30 Days Ago		2.33
Estimated Long-Term EPS	S Growth Ra	te 10.00	60 Days Ago		3.00
Next EPS Report Date		03/15/2007	90 Days Ago		3.00
Fundamental Ratios					
P/E		<b>EPS Growth</b>		Sales Growth	
Current FY Estimate:	29.30	vs. Previous Year	12.00%	vs. Previous Yea	ar 10.01%
Trailing 12 Months:	34.18	vs. Previous Quar	ter 14.29%	vs. Previous Qua	arter: 8.64%
PEG Ratio	2.93				,
Price Ratios		ROE		ROA	
Price/Book	1.92	12/31/06	-	12/31/06	-
Price/Cash Flow	16.42	09/30/06	5.98	09/30/06	1.97
Price / Sales	-	06/30/06	5.80	06/30/06	1.88
Current Ratio		Quick Ratio		Operating Mar	gin
12/31/06	-	12/31/06	-	12/31/06	-
09/30/06	1.35	09/30/06	1.35	09/30/06	4.14
06/30/06	1.17	06/30/06	1.17	06/30/06	3.93
Net Margin		Pre-Tax Margin		Book Value	
12/31/06	-	12/31/06	-	12/31/06	-
09/30/06	5.54	09/30/06	5.54	09/30/06	6.96
06/30/06	5.13	06/30/06	5.13	06/30/06	6.70
Inventory Turnover		Debt-to-Equity		Debt to Captia	ı
12/31/06	-	12/31/06	-	12/31/06	

09/30/06	- 09/30/06	0.80	09/30/06	44.38
06/30/06	- 06/30/06	0.81	06/30/06	44.56



Aqua A	merica (NYSE)				Scottrade <sup>-</sup>
WTR	23.92	<b>▼-</b> 0.06	(-0.25%)	Vol. 358,100	12:20 CST

Agua America is the largest publicly-traded U.S.-based water utility serving residents in Pennsylvania, Ohio, Illinois, Texas, New Jersey, Indiana, Virginia, Florida, North Carolina, Maine, Missouri, New York, South Carolina and Kentucky. The company has been committed to the preservation and improvement of the environment throughout its history, which spans more than 100 years.

## **General Information**

AQUA AMER INC

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Email: investorrelations@aquaamerica.com

Industry

**UTIL-WATER SPLY** 

Sector:

Utilities

Fiscal Year End Last Reported Quarter

December 12/31/06

Next EPS Date

02/28/2007

## Price and Volume Information

Zacks Rank	/2
Yesterday's Close	23.98
52 Week High	29.59
52 Week Low	20.61
Beta	0.18
20 Day Moving Average	708,456.50
Target Price Consensus	26.75



## % Price Change

4 Week 12 Week % Price Change Relative to S&P 500

4.63 4 Week -2.7212 Week

2.30

-6.44

YTD		2.11	YTD		-1.23
Share Information Shares Outstanding (millions)		132.09	Dividend Information Dividend Yield Annual Dividend	ation	1.98% \$0.46
Market Capitalization (millions)		3,072.46	Payout Ratio		0.00
Short Ratio		17.56	Change in Payout	Ratio	0.00
Last Split Date		12/03/2001	Last Dividend Pay	out / Amount	11/15/2006 / \$0.12
EPS Information			Consoneus Pa	commendations	
Current Quarter EPS Cons	ensus Estir	mate 0.19	Current (1=Strong		
Current Year EPS Consens			30 Days Ago	buy, 0-oliong oc	1.29
Estimated Long-Term EPS	Growth Ra		60 Days Ago		1.33
Next EPS Report Date		02/28/2007	90 Days Ago		1.33
Fundamental Ratios			,		
P/E		EPS Growth		Sales Growth	
Current FY Estimate:	27.97	vs. Previous Year	-3.45%	vs. Previous Yea	r 7.43%
Trailing 12 Months:	34.21	vs. Previous Quart	ter 23.53%	vs. Previous Qua	
PEG Ratio	3.29				
Price Ratios		ROE		ROA	
Price/Book	3.46	12/31/06	_	12/31/06	-
Price/Cash Flow	19.11	09/30/06	10.41	09/30/06	3.28
Price / Sales	-	06/30/06	10.82	06/30/06	3.38
Current Ratio		Quick Ratio		Operating Marg	in
12/31/06	-	12/31/06	-	12/31/06	-
09/30/06	0.42	09/30/06	0.39	09/30/06	17.02
06/30/06	0.44	06/30/06	0.41	06/30/06	17.48
Net Margin		Pre-Tax Margin		Book Value	
12/31/06	-	12/31/06	-	12/31/06	-
09/30/06	27.80	09/30/06	27.80	09/30/06	6.73
06/30/06	28.50	06/30/06	28.50	06/30/06	6.66
Inventory Turnover		Debt-to-Equity		Debt to Captial	
12/31/06	-	12/31/06	-	12/31/06	-
09/30/06	0.00	09/30/06	1.03	09/30/06	50.88

06/30/06

0.00 06/30/06

1.04 06/30/06



ATLAN'	TA GAS LIGI	HT (NYSE)			Scottrade <sup>-</sup>
ATG	41.74	<b>▼</b> -0.50	(-1.18%)	Vol. 99,000	12:26 CST

AGL Resources principal business is the distribution of natural gas to customers in central, northwest, northeast and southeast Georgia and the Chattanooga, Tennessee area through its natural gas distribution subsidiary. AGL's major service area is the ten county metropolitan Atlanta area.

## **General Information**

AGL RESOURCES

Ten Peachtree Place NE Atlanta, GA 30309 Phone: 404 584-4000

Fax: 404 584-3945

Web: www.aglresources.com Email: scave@aglresources.com

Industry

**UTIL-GAS DISTR** 

Sector:

Utilities

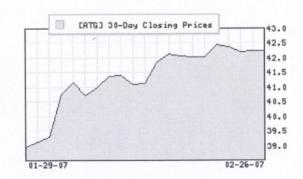
Fiscal Year End Last Reported Quarter

Next EPS Date

December 12/31/06 05/09/2007

### Price and Volume Information

Zacks Rank	i2
Yesterday's Close	42.24
52 Week High	42.45
52 Week Low	34.75
Beta	0.35
20 Day Moving Average	454,960.94
Target Price Consensus	42.42



## % Price Change

4 Week 12 Week YTD 

 % Price Change Relative to S&P 500

 9.49
 4 Week
 7.05

 9.92
 12 Week
 5.71

 8.51
 YTD
 5.28

Share Information			Dividend Informa	ation	
Shares Outstanding			Dividend Yield	ation	3.88%
(millions)		77.70	Annual Dividend		\$1.64
Market Capitalization		3.280.32			0.54
(millions)			Change in Payout	Ratio	-0.02
Short Ratio		10.00	Last Dividend Pay		1/15/2006 / \$0.37
Last Split Date		12/04/1995	,		
<b>EPS Information</b>			Consensus Re	commendations	
Current Quarter EPS Cons	ensus Estin	nate 1.40	Current (1=Strong	Buy, 5=Strong Sel	2.57
Current Year EPS Consens	sus Estimat	e 2.78	30 Days Ago		2.38
Estimated Long-Term EPS	Growth Ra	te 5.00	60 Days Ago		2.38
Next EPS Report Date		05/09/2007	90 Days Ago		2.38
Fundamental Ratios					
		EPS Growth		Sales Growth	
P/E Current FY Estimate:	15.10	vs. Previous Year	20 /11%	vs. Previous Year	-28.80%
Trailing 12 Months:	15.52	vs. Previous Quart		vs. Previous Qua	
PEG Ratio	3.04	vs. i levious quali	00.4070	vs. i ievious Qua	02,0070
	3.04				
Price Ratios	0.04	ROE	40.00	ROA	0.04
Price/Book	2.04	12/31/06	13.36		3.61
Price/Cash Flow	9.37	09/30/06	14.81		3.91
Price / Sales	1.25	06/30/06	13.75	06/30/06	3.52
Current Ratio		Quick Ratio		Operating Marg	
12/31/06	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	12/31/06	0.75		8.08
09/30/06	1.15	09/30/06	0.67	09/30/06	7.94
06/30/06	1.12	06/30/06	0.64	06/30/06	7.32
Net Margin		Pre-Tax Margin		Book Value	
12/31/06	13.01	12/31/06	13.01	12/31/06	20.71
09/30/06	12.72	09/30/06	12.72	09/30/06	20.30
06/30/06	11.75	06/30/06	11.75	06/30/06	20.18
Inventory Turnover		Debt-to-Equity		<b>Debt to Captial</b>	,
12/31/06	2.58	12/31/06	1.01	12/31/06	50.84
09/30/06	3.07	09/30/06	1.03	09/30/06	51.38
06/30/06	3.23	06/30/06	1.04	06/30/06	51.44



ATMOS ENERGY CP (NYSE)					Scottrade <sup>-</sup>
ATO	31.36	▼-0.11	(-0.35%)	Vol. 158,700	12:57 CST

Atmos Energy Corporation distributes and sells natural gas to residential, commercial, industrial, agricultural and other customers. Atmos operates through five divisions in cities, towns and communities in service areas located in Colorado, Georgia, Illinois, Iowa, Kansas, Kentucky, Louisiana, Missouri, South Carolina, Tennessee, Texas and Virginia. The Company has entered into an agreement to sell all of its natural gas utility operations in South Carolina. The Company also transports natural gas for others through its distribution system.

# **General Information**

ATMOS ENERGY CP

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Web: www.atmosenergy.com

Email: InvestorRelations@atmosenergy.com

Industry

**UTIL-GAS DISTR** 

Sector:

Utilities

Fiscal Year End Last Reported Quarter September 12/31/06

Next EPS Date

05/10/2007

## Price and Volume Information

Zacks Rank	/R
Yesterday's Close	31.47
52 Week High	33.01
52 Week Low	26.00
Beta	0.45
20 Day Moving Average	322,488.00
Target Price Consensus	33.9



4 Week



% Price Change Relative to S&P 500

-2.07 4 Week

12 Week		-2.37	12 Week		-0.88
YTD		-1.94	YTD		0.23
Share Information			Dividend Informa	ation	
Shares Outstanding		88.58	Dividend Yield		4.09%
(millions) Market Capitalization			Annual Dividend		\$1.28
(millions)		2,771.57	,		0.54
Short Ratio		4.76	Change in Payout		-0.17
Last Split Date		05/17/1994	Last Dividend Pay	out / Amount	02/22/2007 / \$0.32
EPS Information			Consensus Re	commendatio	ns
Current Quarter EPS Cons	sensus Estir	mate 1.17	Current (1=Strong	Buy, 5=Strong S	Sell) 2.50
Current Year EPS Conser	isus Estimat	te 1.95	30 Days Ago		2.40
Estimated Long-Term EPS	Growth Ra	te 5.30	60 Days Ago		2.57
Next EPS Report Date		05/10/2007	90 Days Ago		2.57
Fundamental Ratios					
P/E		EPS Growth		Sales Growth	
Current FY Estimate:	16.12	vs. Previous Year	10.23%	vs. Previous Ye	ear -29.83%
Trailing 12 Months:	13.26	vs. Previous Quart	ter 288.00%	vs. Previous Qu	
PEG Ratio	3.07				
Price Ratios		ROE		ROA	
Price/Book	1.42	12/31/06	11.18	12/31/06	3.29
Price/Cash Flow	7.33	09/30/06	11.03	09/30/06	3.07
Price / Sales	0.51	06/30/06	8.84	06/30/06	2.45
Current Ratio		Quick Ratio		Operating Ma	rgin
12/31/06	0.97	12/31/06	0.65	12/31/06	3.54
09/30/06	1.00	09/30/06	0.59	09/30/06	2.98
06/30/06	1.03	06/30/06	0.60	06/30/06	2.36
Net Margin		Pre-Tax Margin		Book Value	
12/31/06	4.68	12/31/06	4.68	12/31/06	22.01
09/30/06	3.85	09/30/06	3.85	09/30/06	20.20
06/30/06	3.25	06/30/06	3.25	06/30/06	20.51
Inventory Turnover		Debt-to-Equity		Debt to Captia	al
12/31/06	9.09	12/31/06	0.98	12/31/06	49.45

09/30/06	10.27 09/30/06	1.32 09/30/06	56.95
06/30/06	10.53 06/30/06	1.31 06/30/06	56.71



LACLEDE GROUP INC (NYSE)					Scottrade
LG	31.58	<b>▼-</b> 0.39	(-1.22%)	Vol. 29,300	12:16 CST

The Laclede Group, Inc. is a public utility engaged in the retail distribution and transportation of natural gas. The Company, which is subject to the jurisdiction of the Missouri Public Service Commission, serves the City of St. Louis, St. Louis County, the City of St. Charles, St. Charles County, the town of Arnold, and parts of Franklin, Jefferson, St. Francois, Ste. Genevieve, Iron, Madison and Butler Counties, all in Missouri.

# **General Information**

LACLEDE GRP INC

720 Olive Street St. Louis, MO 63101 Phone: 314-342-0500

Fax: -

Web: www.thelacledegroup.com Email: mkullman@lacledegas.com

Industry

**UTIL-GAS DISTR** 

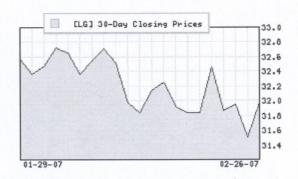
Sector:

Utilities

Fiscal Year End Last Reported Quarter Next EPS Date September 12/31/06 04/27/2007

# **Price and Volume Information**

Zacks Rank	iz
Yesterday's Close	31.97
52 Week High	36.95
52 Week Low	31.35
Beta	0.47
20 Day Moving Average	123,355.00
Target Price Consensus	N/A



#### % Price Change

4 Week 12 Week % Price Change Relative to S&P 500 -2.41 4 Week

-2.41 4 Week -12.66 12 Week -4.59

-16.00

YTD	-8.79	YTD		-11.43
Share Information		Dividend Informa	ation	
Shares Outstanding	21.53	Dividend Yield		4.57%
(millions)		Annual Dividend		\$1.46
Market Capitalization (millions)	687.91	Payout Ratio		0.72
Short Ratio	22.64	Change in Payout	Ratio	-0.07
Last Split Date	03/08/1994	Last Dividend Pay	out / Amount	12/07/2006 / \$0.37
EPS Information		Conconcue Po	commendations	
Current Quarter EPS Consensus E	stimate 0.98	Current (1=Strong		
Current Year EPS Consensus Estir			buy, o-oliving oc	3.00
Estimated Long-Term EPS Growth		60 Days Ago		3.00
Next EPS Report Date	04/27/2007			3.00
•	01/2//2007	,		0.00
Fundamental Ratios				
P/E	EPS Growth		Sales Growth	
	2 vs. Previous Year		vs. Previous Yea	
	4 vs. Previous Quar	ter 2,325.00%	vs. Previous Qua	arter: 100.58%
PEG Ratio	-			
Price Ratios	ROE		ROA	
Price/Book 1.6	4 12/31/06	10.61	12/31/06	2.79
Price/Cash Flow 8.1	3 09/30/06	12.54	09/30/06	3.27
Price / Sales 0.3	7 06/30/06	11.74	06/30/06	3.09
Current Ratio	Quick Ratio	1	Operating Marg	jin
12/31/06 1.0	2 12/31/06	0.67	12/31/06	2.35
09/30/06 1.0	7 09/30/06	0.69	09/30/06	2.53
06/30/06 1.1	5 06/30/06	0.88	06/30/06	2.32
Net Margin	Pre-Tax Margin		Book Value	
12/31/06 3.4	4 12/31/06	3.44	12/31/06	19.44
09/30/06 3.6	3 09/30/06	3.63	09/30/06	18.85
06/30/06 3.3	4 06/30/06	3.34	06/30/06	19.08
Inventory Turnover	Debt-to-Equity		Debt to Captial	
12/31/06 12.4	5 12/31/06	0.85	12/31/06	45.88
09/30/06 13.9	2 09/30/06	0.98	09/30/06	49.50

06/30/06

13.28 06/30/06

0.97 06/30/06



N J RESOURCES CP (NYSE)					Scottrade <sup>-</sup>
NJR	49.22	▼-0.51	(-1.03%)	Vol. 62,200	13:11 CST

NJ RESOURCES is an exempt energy svcs holding company providing retail & wholesale natural gas & related energy services to customers from the Gulf Coast to New England. Subsidiaries include: (1) N J Natural Gas Co, a natural gas distribution company that provides regulated energy & appliance services to residential, commercial & industrial customers in central & northern N J. (2) NJR Energy Holdings Corp formerly NJR Energy Svcs Corp & (3) NJR Development Corp, a sub-holding company of NJR, which includes the Company's remaining unregulated operating subsidiaries.

# **General Information**

NJ RESOURCES

1415 Wyckoff Road

Wall, NJ 07719

Phone: 732 938-1480

Fax: -

Web: www2.njresources.com Email: investcont@njresources.com

Industry

**UTIL-GAS DISTR** 

Sector:

Utilities

Fiscal Year End

September 12/31/06

Last Reported Quarter Next EPS Date

05/09/2007

#### Price and Volume Information

Zacks Rank	12
Yesterday's Close	49.73
52 Week High	52.55
52 Week Low	42.91
Beta	-0.01
20 Day Moving Average	212,657.34
Target Price Consensus	48



4 Week

% Price Change Relative to S&P 500

2.66 4 Week



12 Week		-3.29	12 Week		-1.82
YTD		1.61	YTD		3.38
Share Information			Dividend Informa	ation	
Shares Outstanding		27.83	Dividend Yield		3.08%
(millions) Market Capitalization			Annual Dividend		\$1.52
(millions)		1,373.89	Payout Ratio		0.59
Short Ratio		10.88	Change in Payout		0.07
Last Split Date		03/04/2002	Last Dividend Pay	out / Amount	12/13/2006 / \$0.38
EPS Information			Consensus Re	commendation	S
Current Quarter EPS Conser	sus Estir	mate 2.12	Current (1=Strong	Buy, 5=Strong Se	ell) 2.33
Current Year EPS Consensu	s Estima	te 2.91	30 Days Ago		2.33
Estimated Long-Term EPS G	rowth Ra	ate 6.00	60 Days Ago		2.33
Next EPS Report Date		05/09/2007	90 Days Ago		2.33
Fundamental Ratios					
P/E		EPS Growth		Sales Growth	
Current FY Estimate:	16.95	vs. Previous Year	-17.89%	vs. Previous Yea	ar -36.33%
Trailing 12 Months:	19.13	vs. Previous Quart	er 334.88%	vs. Previous Qua	arter: 38.72%
PEG Ratio	2.82				
Price Ratios		ROE		ROA	
Price/Book	2.12	12/31/06	11.68	12/31/06	3.15
Price/Cash Flow	12.20	09/30/06	13.30	09/30/06	3.49
Price / Sales	0.48	06/30/06	15.73	06/30/06	3.88
Current Ratio		Quick Ratio		Operating Marg	gin
12/31/06	1.06	12/31/06	0.58	12/31/06	2.52
09/30/06	1.08	09/30/06	0.50	09/30/06	2.38
06/30/06	1.15	06/30/06	0.54	06/30/06	2.48
Net Margin		Pre-Tax Margin		Book Value	
12/31/06	4.10	12/31/06	4.10	12/31/06	23.25
09/30/06	3.90	09/30/06	3.90	09/30/06	22.14
06/30/06	3.97	06/30/06	3.97	06/30/06	21.25
Inventory Turnover		Debt-to-Equity		Debt to Captial	
12/31/06	5.83	12/31/06	0.52	12/31/06	34.29

09/30/06	9.48	09/30/06	0.53	09/30/06	34.84
06/30/06	12.61	06/30/06	0.56	06/30/06	35.92



NICOR	INC (NYSE)				Scottrade <sup>-</sup>
GAS	46.61	<b>▼-</b> 0.40	(-0.85%)	Vol. 184,200	13:14 CST

NICOR Inc. is a holding company. Its principal subsidiaries are Northern Illinois Gas Company, one of the nation's largest distributors of natural gas, and Tropical Shipping, one of the leading transporters of containerized freight in the Caribbean. Gas distribution is Nicor's primary business, representing the majority of consolidated operating income and assets. Nicor also owns several energy-related subsidiaries and is a partner in Nicor Energy, a provider of unregulated energy products and services.

# **General Information**

NICOR INC

1844 Ferry Road

Naperville, IL 60563-9600 Phone: 630 305-9500

Fax: 630 983-9328 Web: www.nicor.com

Email: None

Industry Sector:

**UTIL-GAS DISTR** 

Utilities

Fiscal Year End

December

Last Reported Quarter Next EPS Date

12/31/06 05/08/2007

#### Price and Volume Information

Zacks Rank	R
Yesterday's Close	47.01
52 Week High	49.66
52 Week Low	38.91
Beta	0.87
20 Day Moving Average	423,751.91
Target Price Consensus	46.38



[GAS] 30-Day Closing Prices

4 Week

12 Week

% Price Change

-1.77

4 Week -7.91 12 Week

02-13-07

2.32

46.0 47.5 47.0 46.5 46.0 45.5 45.0 44.5

03-12-07

-6.51

YTD		-2.99	YTD		-0.97
Share Information			Dividend Informa	ation	
Shares Outstanding		44.91	Dividend Yield		4.10%
(millions)			Annual Dividend		\$1.86
Market Capitalization (millions)		2,039.01	Payout Ratio		0.64
Short Ratio		19.32	Change in Payout	Ratio	0.00
Last Split Date		04/27/1993	Last Dividend Pay	out / Amount 12	/27/2006 / \$0.47
EPS Information				commendations	
Current Quarter EPS Cons				Buy, 5=Strong Sell)	
Current Year EPS Consen			, ,		3.00
Estimated Long-Term EPS	Growth Ra		60 Days Ago		3.00
Next EPS Report Date		05/08/2007	90 Days Ago		3.00
Fundamental Ratios					
P/E		EPS Growth		Sales Growth	
Current FY Estimate:	16 39	vs. Previous Year	26 47%	vs. Previous Year	-38.25%
Trailing 12 Months:		vs. Previous Quart		vs. Previous Quarte	
PEG Ratio	8.19	vo. i roviodo dadi.	000.7170	vo., rovious additi	100.1-170
Price Ratios		ROE		ROA	
Price/Book	2 23	12/31/06	15.53	12/31/06	3.35
Price/Cash Flow		09/30/06	14.21		2.95
Price / Sales		06/30/06		06/30/06	2.55
	0.03		12.50		
Current Ratio		Quick Ratio		Operating Margin	
12/31/06		12/31/06		12/31/06	4.42
09/30/06	0.69	09/30/06		09/30/06	3.38
06/30/06	0.71	06/30/06	0.67	06/30/06	2.95
Net Margin		Pre-Tax Margin		Book Value	
12/31/06	5.88	12/31/06	5.88	12/31/06	19.52
09/30/06	4.52	09/30/06	4.52	09/30/06	18.60
06/30/06	3.65	06/30/06	3.65	06/30/06	18.66
Inventory Turnover		Debt-to-Equity		Debt to Captial	
12/31/06	19.96	12/31/06	0.57	12/31/06	36.29
09/30/06	21.86	09/30/06	0.55	09/30/06	35.67

06/30/06 16.93 06/30/06

0.57 06/30/06



NORTHWEST NAT GAS (NYSE)					Scottrade
NWN	45.23	<b>▼-</b> 0.68	(-1.48%)	Vol. 59,000	12:36 CST

NW Natural is principally engaged in the distribution of natural gas. The Oregon Public Utility Commission (OPUC) has allocated to NW Natural as its exclusive service area a major portion of western Oregon, including the Portland metropolitan area, most of the fertile Willamette Valley and the coastal area from Astoria to Coos Bay. NW Natural also holds certificates from the Washington Utilities and Transportation Commission (WUTC) granting it exclusive rights to serve portions of three Washington counties bordering the Columbia River.

#### **General Information**

NORTHWEST NAT G

220 N.W. Second Avenue Portland, OR 97209

Phone: 503 226-4211 Fax: 503 273-4824

Web: www.nwnatural.com

Email: investorinformation@nwnatural.com

Industry

**UTIL-GAS DISTR** 

Sector: Utilities

Fiscal Year End

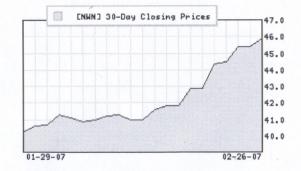
December 12/31/06

Last Reported Quarter Next EPS Date

05/10/2007

# **Price and Volume Information**

Zacks Rank	12
Yesterday's Close	45.91
52 Week High	45.40
52 Week Low	33.27
Beta	0.14
20 Day Moving Average	124,529.50
Target Price Consensus	44.67



% Price Change Relative to S&P 500

#### % Price Change

4 Week 11.49 4 Week 9.01 12 Week 10.09 12 Week 5.87

14D		6.97	YTD		-1.50
YTD		0.97			1.00
Share Information			Dividend Informa	ition	3.13%
Shares Outstanding (millions)		27.50	Dividend Yield  Annual Dividend		\$1.42
Market Capitalization		1,248.73			0.62
(millions)			Change in Payout	Ratio	0.00
Short Ratio		17.22	Last Dividend Paye		9/2007 / \$0.35
Last Split Date		09/09/1996	Edot Dividoria i dy	Jac / / 1110 art	.0,200, , 40.00
EPS Information			Consensus Red	commendations	
Current Quarter EPS Conse	ensus Estir	mate 1.54	Current (1=Strong	Buy, 5=Strong Sell)	2.50
Current Year EPS Consens	us Estimat	e 2.38	30 Days Ago		2.86
Estimated Long-Term EPS	Growth Ra	te 5.30	60 Days Ago		2.86
Next EPS Report Date		05/10/2007	90 Days Ago		2.86
Eurodomontal Datice			,		
Fundamental Ratios		EPS Growth		Sales Growth	
P/E Current FY Estimate:	19.11		17 20%	vs. Previous Year	6.90%
Trailing 12 Months:		vs. Previous Quar		vs. Previous Quarter	
PEG Ratio	3.58	vo. i roviodo addi	411.1070	7017 1011000 0001101	
		ROE		ROA	
Price Ratios Price/Book	2.11	12/31/06	10 44	12/31/06	3.49
Price/Cash Flow	10.44	09/30/06	9.81		3.15
Price / Sales	2.39			06/30/06	3.10
		Quick Ratio		Operating Margin	
Current Ratio 12/31/06		12/31/06	_	12/31/06	12.13
09/30/06		09/30/06	0.43		11.46
06/30/06		06/30/06		06/30/06	13.49
	0.02	Pre-Tax Margin		Book Value	
Net Margin 12/31/06		12/31/06	_	12/31/06	_
09/30/06	17.94		17.94		21.51
06/30/06		06/30/06		06/30/06	22.15
Inventory Turnover		Debt-to-Equity		Debt to Captial	
12/31/06	_	12/31/06	_	12/31/06	_
09/30/06		09/30/06	0.83	09/30/06	45.37
U W					

06/30/06 8.61 06/30/06

0.81 06/30/06



# PIEDMONT NAT GAS CO (NYSE) PNY 26.02 ▼-0.43 (-1.63%) Vol. 107,500 12:37 CST

Piedmont Natural Gas Co, Inc., is an energy and services company engaged in the transportation and sale of natural gas and the sale of propane to residential, commercial and industrial customers in North Carolina, South Carolina and Tennessee. The Company is the second-largest natural gas utility in the southeast. The Company and its non-utility subsidiaries and divisions are also engaged in acquiring, marketing and arranging for the transportation and storage of natural gas for large-volume purchasers, and in the sale of propane to customers in the Company's three-state service area.

# **General Information**

PIEDMONT NAT GA 4720 Piedmont Row Drive

Charlotte, NC 28210

Phone: 704 364-3120 Fax: 704 364-1395

Web: www.piedmontng.com

Email: margaret.griffith@piedmontng.com

Industry

**UTIL-GAS DISTR** 

Sector:

Utilities

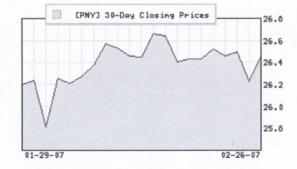
Fiscal Year End Last Reported Quarter October 01/31/07

Next EPS Date

03/13/2007

# Price and Volume Information

Zacks Rank	iz
Yesterday's Close	26.45
52 Week High	28.28
52 Week Low	23.29
Beta	0.30
20 Day Moving Average	188,864.25
Target Price Consensus	27.5



% Price Change Relative to S&P 500

# % Price Change

4 Week

1.07 4 Week

-1.19

12 Week		-4.92	12 Week		-8.56
YTD		-0.93	YTD		-3.72
Share Information			Dividend Informa	ation	
Shares Outstanding		74.72	Dividend Yield		3.62%
(millions)		7 2	Annual Dividend		\$0.96
Market Capitalization (millions)		1,980.00	Payout Ratio		0.00
Short Ratio		27.75	Change in Payout	Ratio	0.00
Last Split Date		04/01/1993	Last Dividend Pay	out / Amount	12/19/2006 / \$0.24
EPS Information			Consensus Re	commendation	S
Current Quarter EPS Con-	sensus Estir	mate 0.98	Current (1=Strong	Buy, 5=Strong Se	ell) 3.00
Current Year EPS Conser	nsus Estimat	te 1.42	30 Days Ago		3.00
Estimated Long-Term EPS	S Growth Ra	te 5.50	60 Days Ago		3.00
Next EPS Report Date		03/13/2007	90 Days Ago		2.89
Fundamental Ratios					
P/E		<b>EPS Growth</b>		Sales Growth	
Current FY Estimate:	18.68	vs. Previous Year	-33.33%	vs. Previous Yea	ar -16.90%
Trailing 12 Months:	20.87	vs. Previous Quart	er 50.00%	vs. Previous Qu	arter: 18.64%
PEG Ratio	3.40				
Price Ratios		ROE		ROA	
Price/Book	2.26	01/31/07	-	01/31/07	-
Price/Cash Flow	10.31	10/31/06	10.64	10/31/06	3.59
Price / Sales	-	07/31/06	10.76	07/31/06	3.67
<b>Current Ratio</b>		Quick Ratio		Operating Mar	gin
01/31/07	-	01/31/07	-	01/31/07	-
10/31/06	1.19	10/31/06	0.82	10/31/06	5.05
07/31/06	1.41	07/31/06	0.94	07/31/06	4.96
Net Margin		Pre-Tax Margin		<b>Book Value</b>	
01/31/07	-	01/31/07	-	01/31/07	-
10/31/06	8.29	10/31/06	8.29	10/31/06	. 11.72
07/31/06	8.12	07/31/06	8.12	07/31/06	11.98
Inventory Turnover		Debt-to-Equity		Debt to Captia	I
01/31/07	-	01/31/07	-	01/31/07	-

10/31/06	9.67	10/31/06	0.93	10/31/06	48.30
07/31/06	9.96	07/31/06	0.91	07/31/06	47.77



# SOUTH JERSEY IND (NYSE)

Scottrade

14:41 CST

SJI 34.36

÷0.81

(2.41%)

Vol. 174.800

South Jersey Inds Inc. is engaged in the business of operating, through subsidiaries, various business enterprises. The company's most significant subsidiary is South Jersey Gas Company (SJG). SJG is a public utility company engaged in the purchase, transmission and sale of natural gas for residential, commercial and industrial use. SJG also makes off-system sales of natural gas on a wholesale basis to various customers on the interstate pipeline system and transports natural gas.

# **General Information**

SOUTH JERSEY IN

1 South Jersey Plaza

Folsom, NJ 08037

Phone: 609 561-9000 Fax: 609-704-1608

Web: www.sjindustries.com

Email: investorrelations@sjindustries.com

Industry

**UTIL-GAS DISTR** 

Sector:

Utilities

Fiscal Year End

December

Last Reported Quarter

12/31/06

Next EPS Date

05/11/2007

# **Price and Volume Information**

Zacks Rank	/B
Yesterday's Close	33.55
52 Week High	34.97
52 Week Low	26.00
Beta	0.26
20 Day Moving Average	163,580.70
Target Price Consensus	36



[SJI] 30-Day Closing Prices

4 Week

% Price Change

-3.29

4 Week 12 Week

02-12-07

0.74

12 Week

-1.01

0.50

35.0 34.5 34.0

03-09-07



YTD		-0.69	YTD		4.02
Share Information			Dividend Informa	ation	
Shares Outstanding (millions)		29.34	Dividend Yield		2.95%
Market Capitalization			Annual Dividend		\$0.98
(millions)		973,53	Payout Ratio		0.50
Short Ratio		9,33	Change in Payout		0.00
Last Split Date		03/04/1993	Last Dividend Pay	out / Amount	12/07/2006 / \$0.25
<b>EPS</b> Information			Consensus Rea	commendation	<b>S</b>
Current Quarter EPS Cons	ensus Estir	nate 0,98	Current (1=Strong	Buy, 5=Strong Se	ell) 1.33
Current Year EPS Consen	sus Estimat	te 1.97	30 Days Ago		1.33
Estimated Long-Term EPS	Growth Ra	te 6,50	60 Days Ago		1.33
Next EPS Report Date		05/11/2007	90 Days Ago		1.33
Fundamental Ratios					
P/E		EPS Growth		Sales Growth	
Current FY Estimate:	16.87	vs. Previous Year	72.50%	vs. Previous Yea	-11.04%
Trailing 12 Months:	16.93	vs. Previous Quart	er 666.67%	vs. Previous Qua	arter: 88.14%
PEG Ratio	2.60				
Price Ratios		ROE		ROA	,
Price/Book	2.24	12/31/06	13.44	12/31/06 -	3.96
Price/Cash Flow	12.63	09/30/06	11.58	09/30/06	3.35
Price / Sales	1.08	06/30/06	12.09	06/30/06	3.47
Current Ratio		Quick Ratio		Operating Marg	gin
12/31/06	-	12/31/06	-	12/31/06	6.32
09/30/06	0.85	09/30/06	0.44	09/30/06	5.16
06/30/06	0.90	06/30/06	0.50	06/30/06	5.05
Net Margin		Pre-Tax Margin		<b>Book Value</b>	
12/31/06	**	12/31/06	**	12/31/06	-
09/30/06	8.53	09/30/06	8.53	09/30/06	14.80
06/30/06	8.37	06/30/06	8.37	06/30/06	14.53
Inventory Turnover		Debt-to-Equity		Debt to Captial	
12/31/06	-	12/31/06	-	12/31/06	-
09/30/06	6.08	09/30/06	0.83	09/30/06	45.32

06/30/06

6.67 06/30/06

0.85 06/30/06



SOUTHWEST GAS CP (NYSE)					Scottrade <sup>-</sup>	
SWX	37.70	<b>.</b> 0.91	(2.47%)	Vol. 1	180,300	15:01 CST

SOUTHWEST GAS CORP. is principally engaged in the business of purchasing, transporting, and distributing natural gas in portions of Arizona, Nevada, and California. The Company also engaged in financial services activities, through PriMerit Bank, Federal Savings Bank (PriMerit or the Bank), a wholly owned subsidiary.

# **General Information**

SOUTHWEST GAS

5241 Spring Mountain Road

P.O. Box 98510

Las Vegas, NV 89193-8510

Phone: 702 876-7237 Fax: 702 873-3820 Web: www.swgas.com

Email: None

Industry

**UTIL-GAS DISTR** 

Sector:

Utilities

Fiscal Year End Last Reported Quarter

Next EPS Date

December 12/31/06 05/08/2007

# Price and Volume Information

Zacks Rank	12
Yesterday's Close	36.79
52 Week High	39.68
52 Week Low	26.76
Beta	0.26
20 Day Moving Average	192,076.70
Target Price Consensus	37.33



# % Price Change

4 Week 12 Week % Price Change Relative to S&P 500 -7.71 4 Week

-4.82

4 Week 12 Week -3.86

-3.37

VCTD		4.00			
YTD		-4.80	YTD		-3.27
Share Information			Dividend Informa	ation	
Shares Outstanding (millions)		42.00	Dividend Yield		2.24%
Market Capitalization			Annual Dividend		\$0.82
(millions)		1,534.15	Payout Ratio		0.41
Short Ratio		8.92	Change in Payout		0.00
Last Split Date		N/A	Last Dividend Pay	out / Amount 02	2/13/2007 / \$0.20
EPS Information				commendations	
Current Quarter EPS Cons				Buy, 5=Strong Sell)	
Current Year EPS Consen			30 Days Ago		3.00
Estimated Long-Term EPS	Growth Ra		60 Days Ago		3.00
Next EPS Report Date		05/08/2007	90 Days Ago		3.00
Fundamental Ratios			,		
P/E		EPS Growth		Sales Growth	
Current FY Estimate:	16.83	vs. Previous Year	20.65%	vs. Previous Year	13.71%
Trailing 12 Months:	18.45	vs. Previous Quart		vs. Previous Quart	
PEG Ratio					
Price Ratios		ROE		ROA	
Price/Book	1.81	12/31/06	10.02	12/31/06	2.59
Price/Cash Flow	6.93	09/30/06		09/30/06	2.24
Price / Sales	0.76	06/30/06		06/30/06	2.10
	0.10		0.55		
Current Ratio		Quick Ratio		Operating Margin	
12/31/06	-	12/31/06		12/31/06	4.00
09/30/06		09/30/06		00/00/00	3.62
06/30/06	0.75	06/30/06	0.75	06/30/06	3.40
Net Margin		Pre-Tax Margin		Book Value	
12/31/06	-	12/31/06	-	12/31/06	-
09/30/06	-	09/30/06	-	09/30/06	-
06/30/06	4.95	06/30/06	4.95	06/30/06	20.47
Inventory Turnover		Debt-to-Equity		Debt to Captial	
12/31/06	-	12/31/06	-	12/31/06	-
09/30/06	-	09/30/06	-	09/30/06	-

06/30/06

- 06/30/06

1.55 06/30/06



WGL Ho	ldings (NYSE)				Scottrade
WGL	32.28	₹-0.52	(-1.59%)	Vol. 110,600	12:43 CST

WASHINGTON GAS LIGHT CO is a public utility that delivers and sells natural gas to metropolitan Washington, D.C. and adjoining areas in Maryland and Virginia. A distribution subsidiary serves portions of Virginia and West Virginia. The Company has four wholly-owned active subsidiaries that include: Shenandoah Gas Company (Shenandoah) is engaged in the delivery and sale of natural gas at retail in the Shenandoah Valley, including Winchester, Middletown, Strasburg, Stephens City and New Market, Virginia, and Martinsburg, West Virginia.

#### **General Information**

WGL HLDGS INC 101 Constitution Ave, N.W Washington, DC 20080 Phone: 703 750-2000 Fax: 703 750-4828

Web: www.wglholdings.com Email: madams@washgas.com

Industry

**UTIL-GAS DISTR** 

Sector:

Next EPS Date

Utilities

Fiscal Year End Last Reported Quarter September 12/31/06 05/09/2007

#### **Price and Volume Information**

Zacks Rank	Æ
Yesterday's Close	32.80
52 Week High	33.47
52 Week Low	27.38
Beta	0.24
20 Day Moving Average	239,499.75
Target Price Consensus	32



4 Week 12 Week 4.15 -1.36



# % Price Change Relative to S&P 500

4 Week 1.83

YTD	0.06	YTD		-4.02
Share Information		Dividend Informa	ation	
Shares Outstanding	48.89	Dividend Yield		4.14%
(millions)	40.03	Annual Dividend		\$1.35
Market Capitalization	1,593.68	Payout Ratio		0.71
(millions) Short Ratio	21.85	Change in Payout	Ratio	-0.10
Last Split Date	05/02/1995	Last Dividend Pay	out / Amount 01/08	/2007 / \$0.34
Last Opin Date	00/02/1000			
<b>EPS Information</b>		Consensus Re	commendations	
Current Quarter EPS Consensus Es	timate 1.18	Current (1=Strong	Buy, 5=Strong Sell)	2.60
Current Year EPS Consensus Estim	ate 1.79	30 Days Ago		2.67
Estimated Long-Term EPS Growth F	Rate 3.00	60 Days Ago		2.67
Next EPS Report Date	05/09/2007	90 Days Ago		2.67
Fundamental Ratios		,		
	EPS Growth		Sales Growth	
P/E Current FY Estimate: 18.2		1 10%	vs. Previous Year	50.80%
Carrotter   Lournato.	vs. Previous Quar		vs. Previous Quarter:	127.31%
Trailing 12 Months: 17.2 PEG Ratio 6.0		011.1170	vs. Frevious Quarter.	127.0170
PEG Ratio 0.0				
Price Ratios	ROE	0.77	ROA	2.20
Price/Book 1.6		0,,,	12/31/06	3.20
Price/Cash Flow 8.4			09/30/06	3.15 3.08
Price / Sales 1.0	6 06/30/06	9.48	06/30/06	3.00
Current Ratio	Quick Ratio		Operating Margin	
12/31/06 1.0			12/31/06	6.14
09/30/06 1.0			09/30/06	7.28
06/30/06 1.1	7 06/30/06	0.71	06/30/06	7.64
Net Margin	Pre-Tax Margin		Book Value	
12/31/06 12.3	2 12/31/06	12.32	12/31/06	19.62
09/30/06 5.9	1 09/30/06	5.91	09/30/06	18.90
06/30/06 9.8	3 06/30/06	9.88	06/30/06	19.41
Inventory Turnover	Debt-to-Equity		Debt to Captial	
12/31/06 8.7		0.63	12/31/06	38.00
09/30/06 7.9	1 09/30/06	0.62	09/30/06	37.75

06/30/06

3.29 06/30/06

0.61 06/30/06



Infrastructure costs in the Water Utility Industry will continue to rise over the long term. Larger companies will acquire smaller ones in an effort to achieve economies of scale.

Foreign companies had been buying a number of U.S. water utilities, but that trend appears to be waning.

Water utility stocks are ranked to underperform the market over the coming 12 months; however, conservative investors can find attractive riskadjusted choices here.

# The Need For Consolidation

Long-term trends in the Water Utility Industry indicate that infrastructure costs will steadily rise. Many of the facilities and pipes that now purify and transport drinking water were built about 100 years ago. Ongoing upgrading and replacement are necessary for these old systems to remain in compliance with rules laid out by the Environmental Protection Agency (EPA). The cost of fixing and upgrading these systems is significantly higher than in the past (even adjusting for inflation) because more-expensive materials need to be used for modern construction. Moreover, transportation costs are much higher and should continue to rise, as nearby sources of water are depleted and farther-away bodies of water must be used. Water is quite difficult and expensive to move because it is heavy and cannot be compressed. Also adding to industry costs is the ongoing issuance of guidelines from the EPA that typically require water utilities to comply with more-stringent water-purity standards. Industry sources estimate that about \$140 billion will be needed over the next 20 years to fund necessary water-system infrastructure improve-

Small and mid-sized water companies usually welcome large-scale suitors. Smaller utilities generally lack the funds needed for long-term structural improvements, and might risk being out of compliance with local and federal laws at some point down the road. In an effort to prevent this unpleasant scenario from happening, many of these smaller companies welcome larger utilities that have the capital resources to remain in compliance with the law. The larger company gains greater geographic diversity from its acquisitions, which helps lessen its susceptibility to weather fluctuations that might cause volatility in earnings. Acquirers also benefit from economies of scale in which costs are

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1996	1997	1998	1999	2000	2001		03-05
1793.9	1924.7	1994.2	2422.6	2550	2750	Revenues (\$mill)	3500
214.4	2.9.2	265.6	295.3	315	335	Net Profit (\$mill)	415
39.2%	37.8%	37.0%	38.2%	39.0%	39.0%	Income Tax Rate	39.0%
7.0%	6.3%	7.5%	8.7%	6.0%	6.0%	AFUDC % to Net Profit.	6.0%
55.7%	56.6%	56.9%	- 55.9%	53.0%	52.0%	Long-Term Debt Ratio	50.0%
40.0%	39.6%	39.7%	42.0%	45.0%	46.0%	Common Equity Ratio	48.0%
5271.8	5703.3	6188.6	7223.7	7300	7900	Total Capital (\$mill)	9300
6377.2	6785.5	7361.9	8961.3	8700	9300	Net Plant (\$mill)	9700
6.0%	6.2%	6.2%	6.0%	6.5%	7.0%	Return on Total Cap'l .	7.5%
9.2%	9.7%	10.0%	9.3%	10.5%	10.5%	Return on Shr. Equity .	11.5%
9.7%	10.2%	10.4%	9.5%	11.0%	11.0%	Return on Com Equity	12.0%
3.3%	3.6%	3.9%	3.2%	3.5%	3.5%	Retained to Com Eq	4.5%
68%	66%	64%	67%	70%	70%	All Div'ds to Net Prof	60%
14.5	15.8	18.3	20.2	Bold &		Avg Ann'l P/E Ratio	13.0
.91	.91	95	1.15	Valu	gures are e Line	Relative P/E Ratio	85
4.6%	4.1%	3.4%	3.3%	esti	mates	Avg Ann'l Div'd Yield	5.0%

#### INDUSTRY TIMELINESS: 81 (of 92)

generally reduced. Too, the regulatory-intensive nature of the Water Utility Industry means that some specific local governments might be more uncooperative with the utilities than other comparable local officials. A larger territory lessens the impact of a particularly onerous regulatory atmosphere.

Acquisition Update

Foreign companies have purchased a large number of domestic water utilities over the past year. These global water companies are attracted to this country's relatively safe political climate and its trend towards the privatization of municipal water and wastewater systems. Currently, there is concern among investors that the large premiums paid for U.S. takeover targets, which approached three times book value, will become more infrequent. British utilities are having regulatory difficulties at home that stand to weaken their designs on the U.S. market. Consequently, there appear to be fewer bidders in the market.

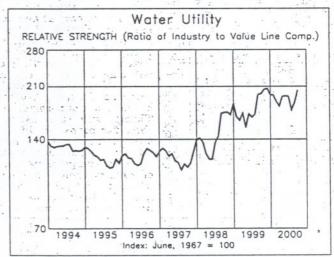
SDWA Regulations

The Safe Drinking Water Act (SDWA) of 1974 (amended in 1996) authorized the EPA to work with state and local governments to test for five potential impurities in drinking water every five years. The EPA mandates what levels of a certain contaminant is acceptable per a specified amount of water. Water utilities typically spend about 15% to 50% of their annual capital outlays in efforts to comply with SDWA guidelines. These companies must also stay in compliance with the Clean Water Act, and numerous state and local laws. At present, the EPA is considering lowering the allowable level of arsenic in drinking water from 50 parts per billion (ppb) to 5 ppb. This measure would be controversial because it would be lower than the standard of the World Health Organization (10 ppb) and would potentially cost domestic water companies billions of dollars.

# Investment Advice

Most of the water utility stocks that are covered in this review are not timely for the coming six to 12 months. Nonetheless, favorable Safety ranks among the group make some of these issues appealing for risk-averse investors seeking decent dividend yields.

Joseph Espaillat



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The events of September 11th have altered many priorities in the Water Utility Industry.

Long-term trends in the industry indicate that the cost of maintaining and upgrading water/wastewater systems will rise. The industry is consolidating, with larger companies acquiring smaller operators to achieve economies of scale.

Water Utility stocks are ranked to underperform the year-ahead market, though some of these issues offer conservative investors appealing riskadjusted, total-return potential.

#### Security Issues

In response to the events of September 11th, the need to secure water systems against terrorism has become a top priority for regulators and water utilities alike, pushing many other legislative issues to the side. The FBI has stated that water companies should be on alert for potential threats in the months ahead. Many water companies are already heeding this warning, and incurring additional costs in the process that may limit near-term bottom-line growth. Also, the industry and regulators are working together to provide approximately \$5 billion in federal funds for immediate infrastructure improvements as part of the pending economic stimulus legislation.

#### Industry Consolidation

Infrastructure costs in the Water Utility Industry will likely rise dramatically over the next 20 years. These companies have to maintain and upgrade their systems continually in order to remain in compliance with increasingly stringent rules issued by the Environmental Protection Agency (EPA) and local regulators. Many of the facilities and pipes that now treat and transport drinking water were built about a century ago. The costs of replacing those systems are significantly higher these days, even adjusting for inflation. Adding to the cost is the fact that nearby bodies of water tend to get depleted and expensive to use, so more-distant sources of water must be brought in to keep up with increasing demand for purified water. Water is difficult and costly to transport, since it is heavy and incompressible. All in all, industry sources estimate that over \$140 billion will be needed to upgrade the nation's water-distribution system over the next 20 years.

The costs of staying in compliance with drinking water laws are especially onerous for smaller regional opera-

Tal.	er val	Compo	site St	atistics		r Utility Industry	ngarin Bu Bu hayun
1997	1998	1999	2000	2001	2002	entron, series	04-06
1439.5 183.2	1503:1	1898.0	2054.9	2210 270	2315 295	Revenues (\$mill) Net Profit (\$mill)	2895 410
38.4%	39.1%	39.7% 9.6%	40.1%	40.0%	40.0% 6.5%	Income Tax Rate AFUDC % to Net Profit	40.0%
57.3% 40.0%	58.0%	56.2% 41.9%	. 54.9%	54.5% 44.5%	54.0% 45.0%	Long-Term Debt Ratio	53.0%
4113.2 5069.2	4524.6 5544.7	5566.3 7039.7	5654.6 7545.4	7975	6335 8425		7495
6.5%	6.3% 10.2%	6.2% 9.6%	6.6% 9.8%	6.0% f0.5%	6.0%	Return on Total Cap'l Return on Shr. Equity	6.5%
10.9%	10.5%	9.8%	9.9%	10.5%	11.0%	Return on Com Equity Retained to Com Eq	11.5%
57%	59%	59%	61%	60%	59%	All Div'ds to Net Prof	52%
.88 3.7%	19.4 1.01 3.0%	19.2 1.09 3.0%	16.3 1.08 3.7%	Valu	gures are le Line mates	Avg Ann'l P/E Ratio Relative P/E Ratio Avg Ann'l Div'd Yield	13.5 .90 3.0%

### INDUSTRY TIMELINESS: 85 (of 97)

tors, since they have a limited base of customers over which to spread these costs. Small and mid-sized utilities generally welcome takeover offers from larger acquirers because of their superior capital resources. The acquiring utility attempts to achieve economies of scale through the transactions. Also, it gains greater geographic diversity, and that can reduce its susceptibility to unfavorable weather patterns and potentially burdensome local regulators.

Large-scale foreign acquirers have been very interested in purchasing domestic water utilities over the past few years, and the latest evidence is the generous takeover offer RWE AG made for American Water Works, the nation's largest public water company. RWE, a Germany-based firm, stands to gain cost synergies in the deal, along with geographic diversity in a politically stable country. Foreign utilities have been fascinated with the risk-adjusted earnings potential of U.S. water companies, and they are likely to continuing their buying spree over the next few years. As such, the number of investor-owned water providers with large territories is steadily dwindling. This development gives additional hope to those U.S. water utilities and investors looking for substantial buyout offers.

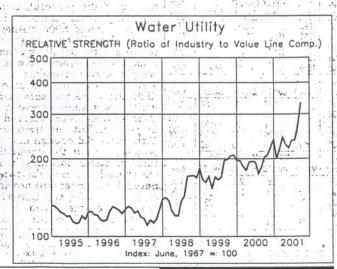
#### **SDWA Regulations**

The Safe Drinking Water Act (SDWA) of 1974 (amended in 1996) authorizes the EPA to work with state and local governments to test for five potential impurities in drinking water every five years. The EPA mandates what levels of a certain contaminant is acceptable per a specified amount of water. Water utilities usually spend a significant portion of their annual capital budgets on efforts to stay in compliance with SDWA guidelines. These companies must also comply with the Clean Water Act, and numerous state and local laws.

#### Investment Advice

The Water Utility stocks in this review are not timely for investment over the next six to 12 months. Nonetheless, a few of these issues possess favorable Safety ranks and solid dividend-growth prospects that may appeal to conservative investors.

Joseph Espaillat



Infrastructure costs in the Water Utility Industry will rise considerably over the coming 20 years. Consequently, larger companies are buying smaller ones in an attempt to achieve economies of scale.

Water utility stocks are ranked to perform in the middle of the pack over the coming 12 months. Nonetheless, conservative investors can find above-average Safety ranks and attractive dividends in the group.

### **Industry Consolidation**

Infrastructure costs in the water utility industry will likely soar over the next two decades. These companies must constantly repair and upgrade their existing water/wastewater systems in order to comply with increasingly strict rules issued by the Environmental Protection Agency (EPA) and local regulators. Many of the facilities and pipes that transport water were constructed over 100 years ago. The costs of replacing these systems is considerably higher now than it was in the past, even adjusting for inflation. Too, the ongoing depletion of nearby sources of water forces many water utilities to obtain water from more-distant, moreexpensive sources. Water is difficult and costly to transport because it is heavy and incompressible. Nonetheless, utilities must continue to keep pace with rising demand for drinking water from growing residential and industrial customers. Recent estimates are that it will cost hundreds of billions of dollars to replace and upgrade failing water infrastructures over the next 20 years. This amounts to more than the entire current assets of the water industry in America. Much of these costs will likely be financed by federal spending and higher water rates. Nevertheless, water utilities are going to have to ante up much higher capital investments over the coming years.

The costs of staying in compliance with drinking water laws are especially onerous for smaller regional companies because they have fewer customers over which to spread their costs. Small and mid-sized water utilities tend to welcome takeover offers from larger, bettercapitalized companies so that they can utilize the bigger firm's superior resources. For instance, the EPA's new rules on the allowable levels of arsenic in drinking water (10 parts per billion by January, 2006) is compelling some smaller utilities to merge with larger ones in an effort to remain in compliance with the new standards. By purchasing these smaller entities, large utilities seek

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	(	Compo	site Sta	atistics:	Water	Utility Industry	
1998	1999	2000	2001	2002	2003		05-07
1503.1	1898.0	2054.9	2190.5	2495	. 2710	Revenues (\$mill)	3360
192.9	232.8	249.7	261.8	275	315	Net Profit (\$mill)	465
39.1%	39.7%	40.1%	39.5%	41.5%	40.0%	Income Tax Rate	40.0%
7.9%	9.6%	5.5%	3.4%	2.0%	2.0%	AFUDC % to Net Profit	3.0%
58.0%	56.2%	:54.9%	56.7%	57.0%	56.0%	Long-Term Debt Ratio	52.5%
39.6%	41.9%	44.0%	42.4%	42.0%	43.0%	Common Equity Ratio	47.0%
4524.6	5566.3	5654.6	6198.1	7005	7085	Total Capital (\$mill)	8780
5544.7	7039.7	7545.4	7991.2	9210	9940	Net Plant (\$mill)	12085
6.3%	6.2%	6.6%	6.3%	6.0%	6.5%	Return on Total Cap'l	7.0%
10.2%	9.6%	9.8%	9.8%	10.0%	10.5%	Return on Shr. Equity	11.5%
10.5%	9.8%	9.9%	9.9%	10.0%	10.5%	Return on Com Equity	11.5%
4.4%	4.1%	4.0%	3.9%	3.0%	4.5%	Retained to Com Eq	5.0%
. 59%	59%	60%	61%	61%	58%	All Div'ds to Net Prof	47%
- 19.4	19.2	- 16.3	20.9			Avg Ann'l P/E Ratio.	13.5
1.01	1.09	1.06	1.07	. Valu	jures are e Line	Relative P/E Ratio	.90
3.0%	3.0%	3.7%	2.9%	esti	nates	Avg Ann'l Div'd Yield	3.0%

# INDUSTRY TIMELINESS: 54 (of 98)

to achieve economies of scale. Also, a bigger company gains greater geographic diversity that can reduce its susceptibility to unfavorable weather patterns and potentially burdensome local regulators. For example, the regulatory climate in California has been extra costly for utilities in the past couple of years, so companies, such as California Water, have been actively looking for acquisition targets outside of the state. On a positive note, the passage of a new law in California will allow water utilities to charge higher rates to customers (subject to refund) if regulators do not render decisions on rate cases within established processing periods. This ought to improve revenues for three out of four companies in this review.

#### Recent Challenges

The events of September 11, 2001 have introduced a whole new set of challenges for the industry. Companies have been spending a lot of time, energy, and money on making sure that their water systems are reasonably secure from potential terrorist attacks. Utilities have turned to local and federal regulators for reimbursement and additional funding, but the amount and timing of future funds is uncertain. Also, insurance costs have soared in the past year, as insurers are now more reluctant to cover companies, like water utilities, that can potentially have catastrophic losses.

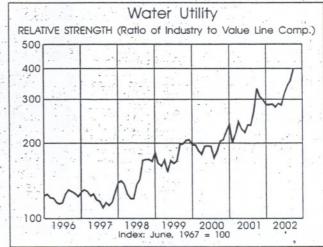
#### **SDWA** Regulations

The Safe Drinking Water Act (SDWA) of 1974 (amended in 1996) authorizes the EPA to work with state and local governments to test for potential impurities in drinking water. The EPA mandates what particular level of a certain contaminant is acceptable per a specified amount of water. Water utilities routinely spend large portions of their annual capital expenditures on efforts to remain in compliance with SDWA guidelines. These companies must also comply with the 1972 Clean Water Act, and numerous other state and local laws, another costly endeavor.

#### **Decent Grounds For Conservative Investors**

The water-utility stocks in this review are unlikely to outperform the year-ahead market. Nonetheless, they offer above-average Safety ranks, attractive dividend yields, and decent risk-adjusted total-return potential.

Joseph Espaillat



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The Water Utility Industry's consolidation continues to gain momentum, as industry leaders look for opportunities to buy out smaller companies that are struggling to keep up with escalating infrastructure costs and heightened regulatory requirements.

Water Utility stocks are unlikely to outperform the broad market for the year ahead. With that said, however, some of these issues offer conservative investors attractive risk-adjusted, totalreturn potential.

#### **Government Regulations**

In order to keep water supplies safe, national purification standards have been established that the water industry is required to meet. Amended in 1996, the Safe Drinking Water Act (SDWA) of 1974 authorizes the Environmental Protection Agency (EPA) to work with state and local governments to periodically test for impurities in drinking water and regulate the levels of contaminants that are acceptable per a specified amount of water. These standards take into account the health effects of chemicals, measurement capabilities, and technical feasibility. One of the most significant contaminants that the industry screens for is arsenic, a naturally occurring substance. However, the EPA is in the process of lowering the tolerated amount of arsenic to 10 parts per billion from 20 parts currently. The change is expected to be in effect by January, 2006. Large chunks of water utilities' annual capital budgets are already spent on infrastructure maintenance and improvements in order to stay in compliance with the SDWA, the Clean Water Act, and numerous state and local laws. This percentage is likely to climb even higher, as fears of terrorism have prompted officials to further tighten regulation requirements.

#### **Rising Infrastructure Costs**

Along with the necessity to remain in compliance with increasingly strict water purity standards, water companies are also being pressured to continually upgrade aging facilities. Many of the water/wastewater systems that are presently in use were built over 100 years ago and are growing outdated. The costs associated with replacing these systems are dramatically higher now than when they initially were put in place. The EPA and other industry sources indicate that hundreds of billions

	Composite Statistics: Water Utility Industry											
1999	2000	2001	2002	2003	2004		06-08					
637.2	704.3	751.8	794.4	845	950	Revenues (\$mill)	1185					
72.4	90.9	95.4	106.6	105	130	Net Profit (\$mill)	190					
40.0%	41.2%	40.2%	38.8%	39.0%	39.5%	Income Tax Rate	40.0%					
				Nil	.5%	AFUDC % to Net Profit	.5%					
51.1%	50.3%	52.4%	53.9%	53.0%	51.5%	Long-Term Debt Ratio	51.0%					
48.3%	49.3%	47.2%	45.9%	46.5%	48.5%	Common Equity Ratio	49.0%					
1444.7	1661.0	1840.7	1973.6	2250	2425	Total Capital (\$mill)	3050					
2100.3	2342.5	2532.3	2751.1	3025	3225	Net Plant (\$mill)	3950					
7.4%	7.0%	6.8%	7.0%	6.5%	7.0%	Return on Total Cap'l	7.5%					
11.5%	10.7%	10.6%	11.2%	10.0%	10.5%	Return on Shr. Equity	12.0%					
11.5%	10.8%	10.7%	11.2%	10.0%	11.0%	Return on Com Equity	12.0%					
3.8%	3.6%	3.3%	3.9%	3.0%	4.0%	Retained to Com Eq	5.5%					
68%	67%	69%	66%	75%	65%	All Div'ds to Net Prof	54%					
19.5	18.6	22.6	21.5	D-1-1-6		Avg Ann'l P/E Ratio	13.5					
1.11	1.21	1.16	1.17	Valu	gures are e Line	Relative P/E Ratio	.90					
3.5%	3.6%	3.1%	3.1%	esti	mates	Avg Ann'l Div'd Yield	3.0%					

# **INDUSTRY TIMELINESS: 97 (of 98)**

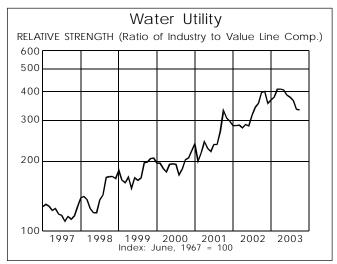
of dollars over the next 20 years will be needed to repair the nation's entire water system. The Water Infrastructure Network believes that there will be a \$12 billion annual shortfall for wastewater infrastructure over that period, and long-term help from the federal government is needed to solve the problem. Water companies will most likely foot the majority of the bill, though, as budget deficits at state and local levels will limit funds dedicated to the industry.

#### **Industry Consolidation**

With the costs of meeting safe drinking water guidelines on the rise, many smaller companies lack the funds to commit to long-term structural improvements. As such, these smaller water companies have been increasingly willing to accept takeover offers from larger suitors with significantly greater capital resources. The larger utilities benefit from economies of scale, which enables them to reduce overhead. In addition, the acquisitions usually enhance geographic diversity, reducing a company's vulnerability to weather fluctuations. Then, too, a multistate territory helps to alleviate a company's exposure to especially onerous regulatory atmospheres. Large foreign utilities have been particularly active in recent years, swallowing up domestic water companies in an effort to gain exposure to the United States' steady population growth.

#### **Investment Advice**

None of the stocks under review are timely at this juncture, as poor weather conditions have resulted in inconsistent earnings patterns. Although *Philadelphia Suburban, California Water Services Group, and American States Water* all have below-average total-return potential out to 2006-2008, income-oriented investors might may find one of these stocks attractive, given their favorable risk profile. Income-bearing stocks have gained some additional popularity of late, because of the recent federal tax bill that reduced the top rate investors pay on dividend income to 15%. As usual, though, we recommend that potential investors careful review individual reports before making any new commitments.



The Water Utility industry continues to rank near the bottom of the *Value Line* investment universe. Infrastructure costs will limit earnings for at least the near future, as the high expenses associated with maintaining and improving the country's water-distribution systems continue to rise.

However, it appears that relief is on the way for some companies. Favorable regulatory rate case rulings have been handed down across the country and look as though they might become the norm.

Meanwhile, consolidation remains the name of the game. Although many of the industry's smaller players lack the capital requirements to meet growing government regulations, larger companies are using the consolidation as way to boost profitability via growing its customer base.

#### **Infrastructure Costs**

Infrastructure costs continue to climb higher as water utility companies, with little help from strapped government branches, are forced to deal with maintaining and upgrading existing facilities. Costs are becoming an even greater concern as time passes because a number of the functioning systems currently in place are over 100 years old and in need of significant repair. That said, we believe that it will take hundreds of billions of dollars to renovate existing pipelines over the next few decades. To make matters worse, the costs of staying in compliance with regulatory laws are growing even more difficult, due to fears of terrorist activities against the country's drinking supplies. Although the Safe Drinking Water Act (SDWA) of 1974 remains the authority for the safety and purity of drinking water, recent amendments are making compliance even more demanding. In 1996, an amendment authorized the Environmental Protection Agency (EPA) to step up local compliance levels. And, governing law-makers now insist that the EPA work with local and state governments to test for impurities in drinking water and to regulate the levels of contaminants that are acceptable.

## **A Buying Opportunity**

The growing regulations and costs associated with staying in compliance with government standards re-

	Composite Statistics: Water Utility Industry											
2000	2001	2002	2003	2004	2005		07-09					
704.3	751.8	794.4	857.0	990	1075	Revenues (\$mill)	1345					
90.9	95.4	106.6	98.6	130	150	Net Profit (\$mill)	205					
41.2%	40.2%	38.8%	40.0%	40.0%	40.0%	Income Tax Rate	40.0%					
-				Nil	Nil	AFUDC % to Net Profit	Nil					
50.3%	52.4%	53.9%	51.2%	51.0%	51.0%	Long-Term Debt Ratio	50.0%					
49.3%	47.2%	45.9%	48.6%	49.0%	49.0%	Common Equity Ratio	50.0%					
1661.0	1840.7	1973.6	2296.4	2615	2870	Total Capital (\$mill)	3550					
2342.5	2532.2	2751.1	3186.1	3400	3605	Net Plant (\$mill)	4150					
7.0%	6.8%	7.0%	5.9%	6.5%	7.0%	Return on Total Cap'l	7.0%					
10.7%	10.6%	11.2%	8.8%	9.5%	9.5%	Return on Shr. Equity	10.0%					
10.8%	10.7%	11.2%	8.8%	9.5%	9.5%	Return on Com Equity	10.0%					
3.6%	3.3%	3.8%	2.5%	3.5%	4.0%	Retained to Com Eq	4.5%					
67%	69%	66%	72%	62%	58%	All Div'ds to Net Prof	52%					
18.6	22.6	21.5	26.0	Dold fi		Avg Ann'l P/E Ratio	18.0					
1.21	1.16	1.17	1.49	Valu	jures are e Line	Relative P/E Ratio	1.20					
3.6%	3.1%	3.1%	2.8%	esti	mates	Avg Ann'l Div'd Yield	3.5%					

# **INDUSTRY TIMELINESS: 94 (of 98)**

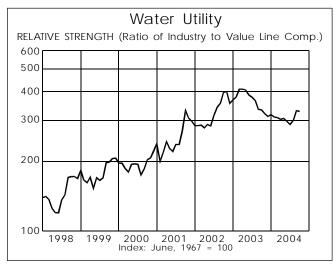
lated to the quality and purification of drinking water is forcing many of the smaller water companies to look to larger suitors. Bigger companies with the market scale to withstand the current onslaught of costs are clearly taking advantage of this situation. Indeed, these firms are growing their businesses at relatively low costs as well as diversifying their operations into less regulated and more-rapidly developing areas of the U.S. *Aqua America* is a perfect example, making nearly 20 acquisitions since the close of last year. *Aqua* recently purchased a number of Pennsylvania-based companies in order to help drive top-line growth. We anticipate that the current consolidation theme will persist, as we expect restructuring costs to continue to rise.

# **Regulatory Assistance**

Although water utility company's have been forced to deal with lethargic case rulings in the past couple of years, some governing bodies are picking up the pace. In California, for example, the California Public Utilities Commission (CPUC) has handed down a number of favorable rate-relief rulings in recent months, and more are expected. With the California electric crisis seemingly in the rearview mirror, the current administration seems intent on delivering more timely assessments. American States Water Company and California Water Service Group have both seen profits benefit from recent case rulings over the past quarter.

#### **Investment Advice**

Most investors will want to take a pass on the stocks covered in the next few pages, as they offer uninspiring returns out to decade's end. In addition, not one of the stocks in this edition is ranked to outperform the market in the next six to 12 months. Nonetheless, incomeoriented investors may like the industry's solid dividend yields. *California Water* may have some added appeal for the risk-averse, given its above average Safety rank. Still, we advise that potential investors carefully review the individual reports in the ensuing pages before making a commitment to any of the stocks mentioned above.



After showing some brief signs of a turnaround last year, the Water Utility Industry appears to have reverted back to its old ways. Feeling the effects of uncooperating weather conditions and high infrastructure costs, the stocks in this industry have had trouble meeting earnings expectations and, as a result, have sorely underperformed the broader market in recent months. In fact, none of the water utility stocks that are covered in the next few pages are ranked better than 3 (Average) for Timeliness, based on our momentum based ranking system. As a whole, the industry ranks near the bottom of the Value Line investment universe.

And the future does not look much brighter. Although a more favorable regulatory landscape and normalized weather conditions ought to provide a better landscape, we are concerned that rapidly growing infrastructure costs will continue to undermine this group's earnings out to late decade.

# **Easing Tensions**

Although designed to keep a balance of power between consumers and providers, regulatory authorities, have long been a thorn in the side of water utility companies. Rate relief case decisions had often been unfavorable and untimely, with some rulings being pushed off for as long as two years. But, it finally looks as though things are taking a turn for the better, especially in the state of California. The California Public Utilities Commission (CPUC), which is responsible for ruling on general rate case requests in the Golden State, has been handing down more-favorable and timely decisions in recent months, thanks, in part, to the efforts of Governor Schwarzenegger. He has replaced members thought to be antagonists of rate relief with more-business-friendly members, and additional moves may be in the works. The recent changes makes for a favorable backdrop for water utility companies operating in California, such as American Štates Water Co. and Čalifornia Water Service Group.

#### **Costs**

But, while regulators are easing their stance on rate case decisions, this does not look to be the case for infrastructure demands. Many of the current infrastruc-

	Composite Statistics: Water Utility Industry											
2001	2002	2003	2004	2005	2006		08-10					
751.8	794.4	857.0	985.6	1250	1350	Revenues (\$mill)	1725					
95.4	106.6	98.6	122.4	155	170	Net Profit (\$mill)	235					
40.2%	38.8%	40.0%	39.4%	39.5%	39.5%	Income Tax Rate	39.5%					
				Nil	Nil	AFUDC % to Net Profit	Nil					
52.4%	53.9%	51.2%	50.0%	52.0%	51.0%	Long-Term Debt Ratio	48.0%					
47.2%	45.9%	48.6%	50.0%	48.0%	49.0%	Common Equity Ratio	52.0%					
1840.7	1973.6	2296.4	2543.6	3000	3400	Total Capital (\$mill)	4100					
2532.2	2751.1	3186.1	3532.5	4050	4250	Net Plant (\$mill)	5000					
6.8%	7.0%	5.9%	6.7%	7.0%	7.5%	Return on Total Cap'l	7.0%					
10.6%	11.2%	8.8%	10.7%	11.0%	11.0%	Return on Shr. Equity	11.5%					
10.7%	11.2%	8.8%	10.7%	11.0%	11.0%	Return on Com Equity	11.5%					
3.3%	3.8%	2.5%	4.6%	5.0%	5.0%	Retained to Com Eq	3.0%					
69%	66%	72%	57%	60%	55%	All Div'ds to Net Prof	45%					
22.6	21.5	26.0	25.5	D-1-1-6		Avg Ann'l P/E Ratio	18.0					
1.16	1.17	1.48	1.36	Valu	gures are e Line	Relative P/E Ratio	1.20					
3.1%	3.1%	2.8%	2.2%	esti	mates	Avg Ann'l Div'd Yield	3.4%					

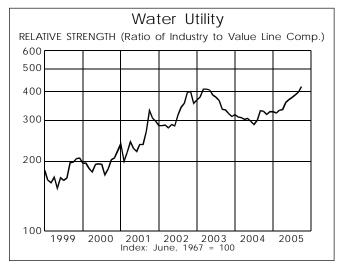
# **INDUSTRY TIMELINESS: 93 (of 98)**

tures are upwards of 100 years old and are in severe need of maintenance and, in some cases, massive renovations and rebuilding. And, given the geopolitical volatility worldwide and the heightened threat of bioterrorism on U.S. water pipelines and reservoirs, these costs are likely to continue to only rise, as companies strive to comply with EPA water purification standards. Infrastructure repair costs are expected to climb in the hundreds of millions of dollars over the next two decades, putting many smaller water companies at a distinct disadvantage. With a dearth of resources to fund these improvements, many such companies are being forced to sell. But, given the current landscape, larger companies with the flexibility and capital to deal with the higher costs are utilizing the weakness to add additional legs of growth to their businesses. Aqua America, the largest water utility in our survey, for example, has made more than 90 acquisitions in the past five years, doubling its revenue base during that time. The company does not seem to be slowing its aggressive spending ways and has the highest return on equity of any of the stocks that we cover here.

#### **Investment Advice**

Most investors will probably want to take a pass on the stocks in this industry. Typically market laggards, not one of the issues covered in the next few pages stands out for near-term or long-term capital gains potential. The limited financial resources of most of these companies, along with the capital-intensive nature of the industry, will probably limit any substantial growth out to late decade.

Those seeking to add an income component to their portfolio may find an attractive option here, though. Each of the stocks in this industry carries an above-average dividend yield, with *American States Water* and *California Water* offering the highest percentages. *California Water* offers some additional appeal, as it has a 2 (Above Average) Safety rank. As is always the case, we recommend that all potential investors take a more in depth look at the individual reports on the following pages before considering making any future financial commitments.



Despite better regulatory backing, most of the water utility companies covered in the next few pages have continued to struggle in recent months. Unseasonably wet weather conditions and escalating infrastructure costs remain at the heart of the problem, pressuring margins and limiting bottom-line growth. As a result, these perennial market laggards continue to rank at the bottom of the Value Line investment universe for Timeliness. Although we suspect that morenormal weather conditions will eventually resume, the growing need for infrastructure renovations remains a major concern going forward. Higher spending poses a threat to the industry's long-term prospects, especially given the capital constraints that most companies are facing. As a result, none of the issues in this industry hold worthwhile 3- to 5-year appreciation potential at this time. Meanwhile, dividend yields have lost some appeal, as well.

# **Regulatory Landscape**

Regulatory authorities, designed to keep a balance of power between consumers and providers, have long been a nemesis to water utility companies. Rate case decisions have been unfavorable and untimely, sometimes taking as long as two years to complete. However, the tide appears to have turned more recently, particularly in California, where a few of the utilities in this *Survey* generate a fair portion of their revenues. The California Public Utilities Commission, for example, behind the efforts of Governor Schwarzenegger, has been handing down more-favorable and timely decisions. He has replaced members thought to be adversaries of rate relief with more-lenient constituents. The changes provide a healthy backdrop for utility companies that request a step-up in rates each year.

#### **Drowning In Expenses**

Although regulators appear to be more business-friendly with case decisions, they are becoming increasingly more stringent with infrastructure demands. Many of the current infrastructures are more than 100 years old, and in need of serious upkeep and even complete renovation in some cases. Meanwhile, the Environmental Protection Agency (EPA) continues to increase its water purification standards, given the

	Composite Statistics: Water Utility Industry											
2002	2003	2004	2005	2006	2007		09-11					
925.2	1030.0	1173.6	1256.9	1350	1485	Revenues (\$mill)	2025					
107.8	112.6	105.7	148.3	150	185	Net Profit (\$mill)	265					
38.6%	39.7%	39.1%	40.5%	39.0%	39.0%	Income Tax Rate	39.0%					
.2%	1.9%	1.0%	1.1%	1.0%	1.0%	AFUDC % to Net Profit	1.0%					
54.1%	51.0%	49.1%	50.4%	50.0%	50.0%	Long-Term Debt Ratio	50.0%					
45.7%	48.8%	50.7%	49.5%	50.0%	50.0%	Common Equity Ratio	50.0%					
2116.4	2449.1	2785.6	3057.5	3300	3600	Total Capital (\$mill)	4565					
2995.1	3405.6	3836.9	4194.7	4475	4750	Net Plant (\$mill)	5650					
6.9%	5.9%	6.0%	6.3%	7.5%	8.0%	Return on Total Cap'l	9.0%					
11.1%	8.8%	9.0%	9.8%	9.5%	10.5%	Return on Shr. Equity	11.5%					
11.1%	8.8%	9.0%	9.8%	9.5%	10.5%	Return on Com Equity	11.5%					
4.0%	2.7%	3.1%	3.7%	4.0%	4.5%	Retained to Com Eq	5.0%					
64%	70%	66%	62%	60%	55%	All Div'ds to Net Prof	55%					
21.6	25.6	25.4	29.4	Dold fir	gures are	Avg Ann'l P/E Ratio	18.0					
1.18	1.46	1.34	1.57	Valu	e Line	Relative P/E Ratio	1.20					
3.0%	2.7%	2.6%	2.1%	esti	mates	Avg Ann'l Div'd Yield	2.5%					

# **INDUSTRY TIMELINESS: 96 (of 97)**

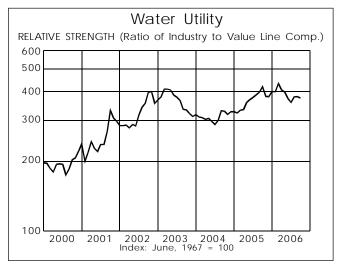
geopolitical volatility worldwide and the threat of bioterrorist actions on U.S. water systems. In all, infrastructure repair costs are expected to climb into the hundreds of millions of dollars over the next two decades. However, these increasing costs will make it very difficult for water utility companies to maintain the earnings momentum that we the expect the improved regulatory landscape to produce this year out to late decade.

#### **Opportunity???**

With limited resources to fund rising capital expenditures, many smaller companies in this industry are being forced to shop their businesses, presenting an opportunity for larger suitors with the resources to foot the bill. No company exemplifies this better than *Aqua America*, the largest water utility in our *Survey*. It has made well over 100 acquisitions in the past five years, using the aforementioned weakness of smaller players to improve their operations and increase their presence. It has drastically increased its customer base and clearly improved its longer-term prospects, and therefore holds the best 3- to 5-year appreciation potential of all the stocks in this industry. We expect that the consolidation trend will continue as water standards continue to climb.

#### **Investment Advice**

This is not an industry that most investors will want to emphasize. Not one of the stocks here stand out for Timeliness or 3- to 5-year appreciation potential. Making matters worse, higher interest rates have increased the income-producing appeal of alternative investments, making the yields found in this industry modestly attractive at best. Thus, most will want to avoid this untimely industry for now. However, *California Water* is ranked 2 for Safety. This, along with its historically steady stream of income, may appeal to more-conservative investors. As always, though, we recommend that investors study the individual reports of each company in the next few pages before making any financial commitments.



Many of the stock's in the Water Utility industry have continued to benefit from more favorable regulatory backing since our October review. Nevertheless, as usual, the industry, as a whole, ranks at the very bottom of the Value Line investment universe for Timeliness. Elevated well and waterway maintenance costs are responsible for most of the blame and will likely continue to dampen profits for years to come. Indeed, the growing need for infrastructure renovations poses a significant threat to the industry's long-term prospects, especially given the capital constraints that most companies are facing. As a result, many investors are going to want to steer clear of the issues in this industry.

# **Regulatory Winds at its Back**

Regulatory authorities, designed to keep a balance of power between utility providers and consumers, have been extremely tough on utility companies in years past. However, current administrations have taken a much more business-friendly approach in recent months in handing down timely and generally favorable rulings. This has not been more glaringly evident than in California, where the California Public Utilities Commission's board has undergone a major facelift with adversaries being replaced with business supporters. Recent rulings set a good tone for utility providers doing business in the Golden State, which typically request a step-up in rates every year. This augurs particularly well for California Water Service Group and American States Water, which both derive a significant amount of business from California.

#### **But Choppy Waters Lie Ahead**

Even still, the same cannot be said for infrastructure costs. Although regulators are softening their stance on rate case decisions, infrastructure demands are growing more stringent. Many of the current infrastructures are more than 100 years old and in need of serious upkeep, or even complete replacement in some cases. Water companies are being forced to pony up significant cash in order to get their systems up to par. Making matters worse, the Environmental Protection Agency (EPA) continues to increase its water purification standards, given the geopolitical volatility worldwide and the threat of bio-terrorist actions on U.S. water systems. In all, infra-

	Composite Statistics: Water Utility Industry											
2002	2003	2004	2005	2006	2007		09-11					
925.2	1030.0	1173.6	1256.9	1350	1450	Revenues (\$mill)	1825					
107.8	112.6	105.7	148.3	155	180	Net Profit (\$mill)	240					
38.6%	39.7%	39.1%	40.5%	39.0%	39.0%	Income Tax Rate	39.0%					
.2%	1.9%	1.0%	1.1%	1.0%	1.0%	AFUDC % to Net Profit	1.0%					
54.1%	51.0%	49.1%	50.4%	50.0%	50.0%	Long-Term Debt Ratio	50.0%					
45.7%	48.8%	50.7%	49.5%	50.0%	50.0%	Common Equity Ratio	50.0%					
2116.4	2449.1	2785.6	3057.5	3360	3650	Total Capital (\$mill)	4500					
2995.1	3405.6	3836.9	4194.7	5350	5750	Net Plant (\$mill)	6800					
6.9%	5.9%	6.0%	6.3%	7.0%	8.0%	Return on Total Cap'l	9.0%					
11.1%	8.8%	9.0%	9.8%	9.0%	10.0%	Return on Shr. Equity	10.5%					
11.1%	8.8%	9.0%	9.8%	9.0%	10.0%	Return on Com Equity	10.5%					
4.0%	2.7%	3.1%	3.7%	3.0%	3.5%	Retained to Com Eq	2.5%					
64%	70%	66%	62%	68%	65%	All Div'ds to Net Prof	62%					
21.6	25.6	25.4	29.4	Dold fi		Avg Ann'l P/E Ratio	18.0					
1.18	1.46	1.34	1.57	Valu	gures are e Line	Relative P/E Ratio	1.20					
3.0%	2.7%	2.6%	2.1%	esti	mates	Avg Ann'l Div'd Yield	2.5%					

#### **INDUSTRY TIMELINESS: 96 (of 96)**

structure repair costs are expected to climb into the hundreds of millions of dollars over the next two decades. These extra costs will make it very difficult for most water utility companies to sustain the earnings momentum that we think the improved regulatory land-scape will produce this year.

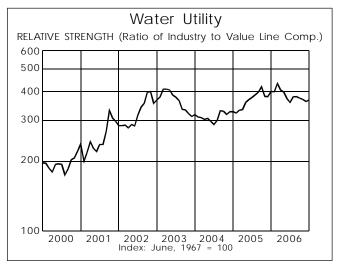
Many of the smaller companies in the industry do not have the resources to meet the capital expenditures that they are being saddled with. Some are deciding to merge with larger, more financially sound enterprises. As a result, some of the biggest water utility companies are growing bigger, faster than ever. Aqua America, for example, has made well over 100 acquisitions in the past five years (28 coming in 2006), based on the aforementioned weakness of smaller players, improved operations and increased their lines. This has drastically increased its customer base and clearly improved its long-term prospects. We expect Aqua to continue growing its business via acquisitions as rising water standards spark further consolidation.

#### **Investment Advice**

Most investors will want to steer clear of the stocks in the Water Utility Industry. Each of the issues in the coming pages hold below average appreciation potential, whether it be for the coming six to 12 months or out to 2009-2011. In fact, each is ranked either 4 or 5 for Timeliness. The growing infrastructure costs and capital constraints mentioned above are likely to continue pressuring bottom lines of water utility companies for years to come.

Meanwhile, most look to have lost their income appeal as well. Higher interest rates have increased the income-producing appeal of alternative investments, making the yields found in this industry modestly attractive at best. That said, more conservative investors looking for a steady stream of income may want to take a peek at *California Water*, which is ranked 2 (Above Average) for Safety. Its yield is still above the *Value Line* average. Nevertheless, we advise all potential investors to carefully look over the individual reports of each company in the next few pages before making any decisions.

Andre J. Costanza







#### 1 BEFORE THE ARIZONA CORPORATION CUMUNICATION Arizona Corporation Commission 2 COMMISSIONERS DOCKETED 3 JEFF HATCH-MILLER, Chairman WILLIAM A. MUNDELL OCT 202006 4 MIKE GLEASON KRISTIN K. MAYES DOCKETED BY 5 BARRY WONG 6 IN THE MATTER OF THE APPLICATION OF DOCKET NO. WS-01303A-06-0283 ARIZONA-AMERICAN WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR Decision No. 68994 8 AUTHORITY TO INCUR LONG-TERM DEBT THROUGH ITS AFFILIATE, AMERICAN WATER CAPITAL CORPORATION. **ORDER** 10 Open Meeting October 17 and 18, 2006 11 Phoenix, Arizona 12 BY THE COMMISSION: 13 On April 26, 2006, Arizona-American Water Company, Inc. ("Arizona-American") filed with 14 the Arizona Corporation Commission ("Commission") an application for authority to incur long-term 15 debt through its affiliate, American Water Capital Corporation ("American") and for authorization of 16 payment obligations to the City of Tolleson, Arizona. 17 18 Having considered the entire record herein and being fully advised in the premises, the 19 Commission finds, concludes, and orders that: 20 FINDINGS OF FACT 21 1. Arizona-American Water Company, Inc. ("Arizona-American" or "Applicant") is a 22 Class "A" Arizona public service corporation providing water and wastewater services in portions of 23 Mohave, Maricopa and Santa Cruz counties. Arizona-American provides utility service to 24 approximately 97,000 water customers and 47,000 sewer customers in Arizona. 25 Arizona-American currently has three rate cases in progress for the following districts: 2. 26 (1) Mohave Water and Wastewater, Docket No. WS-01303A-06-0014; (2) Anthem Water and 27 Anthem/Agua Fria Wastewater, Docket No. WS-01303A-06-0403; and (3) Sun City Wastewater and 28 Sun City West Wastewater, Docket No. WS-01303A-06-0491.

- 3. On April 26, 2006, Arizona-American filed an application with the Commission requesting permission to incur long-term debt through its affiliate, American Water Capital Corporation ("AWCC"). The Applicant also requested approval of an obligation to the City of Tolleson ("Tolleson"). Arizona-American published notice of its application in this matter on May 15, 2006 in the *Mohave Valley Daily News*, on May 18, 2006 in the *Arizona Business Gazeette*, and on May 19, 2006 in the *Nogales International*.
- 4. On September 15, 2006, the Commission's Utilities Division ("Staff") filed a Staff Report recommending approval of this application.
- 5. Arizona-American asks for Commission approval to borrow \$165.45 million from AWCC for the purpose of paying off two promissory notes, totaling \$158.45 million<sup>1</sup>, which mature in November 2006, and to fund two new capital projects with \$7.0 million.
- 6. Arizona-American anticipates obtaining a ten-year interest-only loan of \$165.45 million from AWCC at an interest rate not to exceed 6.5 percent per annum. All principal is due at maturity. The actual interest rate will be determined by market conditions at the time of the transaction, and there are no expected financing costs or issuance fees. AWCC has no coverage ratio requirements for Arizona-American.
- 7. Arizona-American has also requested Commission approval of an \$8.56 million obligation ("Obligation") to Tolleson. In its application, Arizona-American stated that it is the successor in interest to Sun City Sewer as the purchaser of sewage treatment services from Tolleson under a Sewage Treatment and Transportation Services Agreement ("Services Agreement"). Tolleson issued \$8.56 million in bonds to finance the facilities needed to provide service under the Services Agreement. Payments for the bonds, guaranteed by Arizona-American, are made from revenues received under the Services Agreement. The Obligation previously was guaranteed by Citizens Utilities Company ("Citizens") in 1998, however, Arizona-American subsequently acquired the water and wastewater assets and Certificates of Convenience and Necessity held by Citizens in Arizona. The Commission authorized the acquisition in Decision No. 63584 (September 26, 2000).

DECISION NO. **68994** 

<sup>&</sup>lt;sup>1</sup> One note is for \$154,948,119 (Dec. No. 64002 (August 30, 2001)), and the other is for \$3.5 million (Dec. No. 63586 (April 14, 2001)).

Decision No. 63584 approved the transfer of assets and recognizes in the description of the transaction that Arizona-American would assume liabilities for contracts, but is silent regarding approval of the terms of the transaction. Arizona-American seeks to clarify this uncertainty by obtaining Commission approval in this docket for the Obligation.

#### **Engineering Analysis**

- 8. Staff Engineering reviewed the material costs estimates of the two new capital projects submitted in support of the application, expansion of its Mohave Wastewater Treatment Plant in Mohave County, and its Verrado Wastewater Treatment Plant Phase 2 expansion in Maricopa County.
- Applicant plans to expand its Mohave Wastewater Treatment Plant by 250,000 gallons per day to meet projected demands and required wastewater treatment standards. The Mohave Wastewater Treatment Plant currently has a design capacity of 250,000 gallons per day. projections of new hookups show the existing plant capacity will be exceeded by early 2008. The expansion project will include a pre-packaged 250,000 gallons per day treatment facility (matching the existing plant), solids handling facility, expanded blower building, sitework, electrical, and foundation, etc. The estimated total project cost is \$2,763,000.
- 10. Applicant plans to expand the Verrado Wastewater Treatment Plant, which has an existing capacity of 450,000 gallons per day. The projected flow will reach the existing capacity in the summer of 2007. The proposed expansion will increase treatment plant capacity from 450,000 to 1,160,000 gallons per day, which will meet projected demands until 2011. The estimated total project cost is \$4,910,000.
- 11. Staff concluded that the proposed plant additions are reasonable and the estimated total project costs for the two new capital projects are reasonable. However, no "used and useful" determination of the proposed projects was made and no particular treatment should be inferred for rate making or rate base purposes in the future.

#### Financial Analysis

12. The Debt Service Coverage ("DSC") ratio represents the number of times internally generated cash will cover required principal and interest payments on long-term debt. A DSC ratio

DECISION NO. 68994

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greater than 1.0 means that operating cash flow is sufficient to cover debt obligations. A DSC less than 1.0 means that debt service obligations cannot be met from operations and that another source of funds is needed to avoid default.

- 13. The Times Interest Earned Ratio ("TIER") represents the number of times earnings will cover interest expense on short-term and long-term debt. A TIER greater than 1.0 means that operating income is greater than interest expense. A TIER of less than 1.0 is not sustainable in the long term but does not necessarily mean that debt obligations cannot be met in the short term.
- 14. Cash Coverage Ratio ("CCR") represents the number of times internally generated cash covers required interest payments on short-term and long-term debt. A CCR greater than 1.0 means that operating cash flow is greater than interest expense.
- 15. For the year ended December 31, 2005, Staff's financial analysis shows Arizona-American had a 0.52 TIER, a 2.05 DSC and a 2.06 CCR. Staff's pro forma analysis, reflecting the effect of the AWCC debt proposed by Arizona-American assuming a 6.5 percent annual interest rate and 10-year amortization shows a decline to a 0.46 TIER, a 1.81 DSC, and a 1.82 CCR.
- 16. Arizona-American's TIER results reflect that operating income would suffice to cover interest expense in the short-term, but not in the long term. However, DSC results indicate that Arizona-American will be able to meet all obligations with cash generated from operations. Therefore, operating cash flow is sufficient to cover both principal and interest payments on short-and long-term debt obligations.

#### **Capital Structure**

- 17. At December 31, 2005, Arizona-American's capital structure consisted of 8.5 percent short-term debt, 58.6 percent long-term debt, and 32.9 percent equity. Pro forma analysis reflects a capital structure composed of 8.1 percent short-term debt, 57.7 percent long-term debt and 34.2 percent equity.
- 18. On March 21, 2006, Arizona-American received \$35 million in new equity from American Water Works, Inc., its parent company. The effect of this new equity on Arizona-American's equity position was partially offset by a goodwill write-off of \$24.4 million.

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#### Staff's Conclusions and Recommendations

- 19. Based on its review and analysis, Staff concluded that authorization of the \$8.56 million Tolleson Obligation is appropriate to clarify any ambiguity regarding Commission authorization. Staff stated its conclusion that the estimated costs associated with the new capital projects appear to be reasonable, and stated that issuance of the proposed AWCC debt financing not to exceed \$7.0 million to fund new capital projects and not to exceed \$158.45 million to pay off maturing debt is within Arizona-American's corporate powers, is compatible with the public interest, is consistent with sound financial practices and will not impair its ability to provide services.
- 20. Staff recommended that the Commission authorize Arizona-American's request to borrow an amount not to exceed \$165.45 million in new funds from AWCC for the purposes described herein. Staff further recommended that the Commission approve Arizona-American's \$8.56 million Tolleson Obligation pertaining to the Services Agreement as successor in interest to Sun City Sewer.
- 21. Staff further recommended authorizing Arizona-American to engage in any transaction and to execute any documents necessary to effectuate the authorizations granted.
- 22. Staff recommended that the executed loan documents be filed with Docket Control within 30 days of this Decision.
  - 23. Staff's recommendations are reasonable and should be adopted.

#### **CONCLUSIONS OF LAW**

- 1. Arizona-American is a public service corporation within the meaning of Article XV of the Arizona Constitution and A.R.S. §§ 40-281, 40-282, 40-301 and 302.
- 2. The Commission has jurisdiction over Arizona-American and the subject matter of the application.
  - 3. Notice of the application was given in accordance with the law.
  - 4. Staff's recommendations are reasonable and should be adopted.
- 5. The financing approved herein is for lawful purposes within Arizona-American's corporate powers, is compatible with the public interest, with sound financial practices, and with the proper performance by Arizona-American of service as a public service corporation, and will not

impair Arizona-American's ability to perform that service.

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The financing approved herein is for the purposes stated in the application and is reasonably necessary for those purposes, and such purposes are not, wholly or in part, reasonably chargeable to operating expenses or to income.

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#### **ORDER**

IT IS THEREFORE ORDERED Arizona-American Water Company, Inc.'s application for authority to borrow an amount not to exceed \$165.45 million in new funds from American Water Capital Corporation for the purposes described herein shall be, and hereby is, granted.

IT IS FURTHER ORDERED that Arizona-American Water Company, Inc.'s application for authorization of its \$8.56 million obligation to the City of Tolleson Obligation pertaining to the Sewage Treatment and Transportation Services Agreement as successor in interest to Sun City Sewer shall be, and hereby is, granted.

IT IS FURTHER ORDERED that such authority is expressly contingent upon Arizona-American Water Company, Inc.'s use of the proceeds for the purposes set forth in its application.

IT IS FURTHER ORDERED that approval of the financing set forth herein does not constitute or imply approval or disapproval by the Commission of any particular expenditure of the proceeds derived thereby for purposes of establishing just and reasonable rates.

IT IS FURTHER ORDERED that Arizona-American Water Company, Inc. is hereby authorized to engage in any transaction and to execute any documents necessary to effectuate the authorizations granted.

. . .

1	IT IS FURTHER ORDERED that Arizona-American Water Company, Inc. shall file with
2	Docket Control, as a compliance item in this docket, within 30 days of this Decision, a copy of all
3	executed documents associated with the financing authorized herein.
4	IT IS FURTHER ORDERED that this Decision shall become effective immediately.
5	BY ORDER OF THE ARIZONA CORPORATION COMMISSION.
6	10000000000000000000000000000000000000
7	Effer h Jotel- Della Wille Wille
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10	Town lilleam & My /m/
11	COMMISSIONER COMMISSIONER COMMISSIONER
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13	IN WITNESS WHEREOF, I, BRIAN C. McNEIL, Executive Director of the Arizona Corporation Commission, have
14	hereunto set my hand and caused the official seal of the Commission to be affixed at the Capitol, in the City of Phoenix,
15	this <u>204</u> day of <u>Oct</u> , 2006.
16	
17	EXECUTIVE DIRECTOR
18	DIGGENIT
19	DISSENT
20	DISSENT
21	DISSENT
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DOCKET NO.: WS-01303A-06-0283  Craig A. Marks ARIZONA-AMERICAN WATER CO., INC. 19820 N. 7th Street, Suite 201 Phoenix, Arizona 85024  Chaga Division ARIZONA CORPORATION COMMISSION 1200 West Washington Street Phoenix, Arizona 85007  Ernest G. Johnson, Director Utilities Division ARIZONA CORPORATION COMMISSION 1200 West Washington Street Phoenix, Arizona 85007  111 122 13 14 15 16 17 18 19 20 21 22 23 24 25 26	1	SERVICE LIST FOR:	ARIZONA-AMERICAN WATER COMPANY, INC
Craig A. Marks ARIZONA-AMERICAN WATER CO., INC. 19820 N. 7 <sup>th</sup> Street, Suite 201 Phoenix, Arizona 85024  Christopher Kempley, Chief Counsel Legal Division ARIZONA CORPORATION COMMISSION 1200 West Washington Street Phoenix, Arizona 85007  Ernest G. Johnson, Director Utilities Division ARIZONA CORPORATION COMMISSION 1200 West Washington Street Phoenix, Arizona 85007  Phoenix, Arizona 85007  120 121 13 14 15 16 17 18 19 20 21 22 23 24 25 26	2	DOCKET NO.:	WS-01303A-06-0283
Christopher Kempley, Chief Counsel Legal Division ARIZONA CORPORATION COMMISSION 1200 West Washington Street Phoenix, Arizona 85007  Pernest G. Johnson, Director Utilities Division ARIZONA CORPORATION COMMISSION 1200 West Washington Street Phoenix, Arizona 85007	4	ARIŽONA-AMERICAN WATER CO., INC 19820 N. 7 <sup>th</sup> Street, Suite 201	C.
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### ORIGINAL



RECEIVED

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January 8, 2007

2007 JAN -8 P 3: 02

Compliance Item:

AZ CORP COMMISSION
DOCUMENT CONTROL
Decision No. 68994 dated October 20, 2006 in WS-01303A-06-0283 states, "IT IS FURTHER ORDERED that Arizona-American Water Company, Inc. shall file with Docket Control, as a compliance item in this docket, within 30 days of this Decision, a copy of all executed documents associated with the financing authorized herein."

#### Response:

Attached are three new long-term Inter-Company Loan Agreements effective December 21, 2006 between Arizona-American Water Company and American Water Capital Corp. totaling \$159,000,000.

These long-term loans replaced the short-term loans in place from November 6, 2006 until December 21, 2006.

Arizona Corporation Commission

**DOCKETED** 

JAN 0 8 2007

**DOCKETED BY** 

# PROMISSORY NOTE FOR LONG-TERM BORROWINGS 5.39% Maturity - December 21, 2013

\$24,700,000

December 21, 2006

FOR VALUE RECEIVED, Arizona-American Water Company, an Arizona corporation (herein "Borrower") hereby promises to pay to the order of American Water Capital Corp., a Delaware corporation ("Lender"), in same day funds at its offices at 1025 Laurel Oak Rd. Voorhees, NJ 08043 or such other place as Lender may from time to time designate, the principal sum of Twenty-Four Million Seven-Hundred Thousand dollars (\$24,700,000), together with interest thereon from the date hereof until paid in full. Interest shall be charged on the unpaid outstanding principal balance hereof at a rate per annum equal to the rate paid and to be paid by Lender with respect to the borrowings it made in order to provide funds to Borrower hereunder. Interest on borrowings shall be due and payable in immediately available funds on the same business day on which the Lender must pay interest on the borrowings it made in order to provide funds to the Borrower hereunder. The principal amount hereof shall be due and payable hereunder at such times and in such amounts and in such installments hereunder as the Lender must pay with respect to the borrowings it made in order to provide funds to the Lender has provided Borrower with a copy of the documentation Borrower hereunder. evidencing the borrowings made by Lender in order to provide funds to Borrower hereunder. In the absence of manifest error, such documentation and the records maintained by Lender of the amount and term, if any, of borrowings hereunder shall be deemed conclusive.

The occurrence of one or more of any of the following shall constitute an event of default hereunder:

- (a) Borrower shall fail to make any payment of principal and/or interest due hereunder or under any other promissory note between Lender and Borrower within five business days after the same shall become due and payable, whether at maturity or by acceleration or otherwise:
- (b) Borrower shall apply for or consent to the appointment of a receiver, trustee or liquidator of itself or any of its property, admit in writing its inability to pay its debts as they mature, make a general assignment for the benefit of creditors, be adjudicated a bankrupt or insolvent or file a voluntary petition in bankruptcy or a petition or an answer seeking reorganization or an arrangement with creditors or to take advantage of any bankruptcy, reorganization, insolvency, readjustment of debt, dissolution or liquidation of law or statute, or an answer admitting the material allegations of a petition filed against it in any proceeding under any such law, or if action shall be taken by Borrower for the purposes of effecting any of the foregoing; or
- (c) Any order, judgment or decree shall be entered by any court of competent jurisdiction, approving a petition seeking reorganization of Borrower or all or a substantial part of the assets of Borrower, or appointing a receiver, trustee or liquidator of Borrower or any of its property, and such order, judgment or decree shall continue unstayed and in effect for any period of sixty (60) days.

Upon the occurrence of any event of default, the entire unpaid principal sum hereunder plus all interest accrued thereon plus all other sums due and payable to Lender hereunder shall, at the option of Lender, become due and payable immediately. In addition to the foregoing, upon the occurrence of any event of default, Lender may forthwith exercise singly, concurrently, successively or otherwise any and all rights and remedies available to Lender by law, equity, statute or otherwise.

Borrower hereby waivers presentment, demand, notice of nonpayment, protest, notice of protest or other notice of dishonor in connection with any default in the payment of, or any enforcement of the payment of, all amounts due hereunder. To the extent permitted by law, Borrower waives the right to any stay of execution and the benefit of all exemption laws now or hereafter in effect.

Following the occurrence of any event of default, Borrower will pay upon demand all costs and expenses (including all amounts paid to attorneys, accountants, and other advisors employed by Lender), incurred by Lender in the exercise of any of its rights, remedies or powers hereunder with respect to such event of default, and any amount thereof not paid promptly following demand therefor shall be added to the principal sum hereunder and will bear interest at the contract rate set forth herein from the date of such demand until paid in full. In connection with and as part of the foregoing, in the event that this Note is placed in the hands of an attorney for the collection of any sum payable hereunder, Borrower agrees to pay reasonable attorneys' fees for the collection of the amount being claimed hereunder, as well as all costs, disbursements and allowances provided by law.

If for any reason one or more of the provisions of this Note or their application to any entity or circumstances shall be held to be invalid, illegal or unenforceable in any respect or to any extent, such provisions shall nevertheless remain valid, legal and enforceable in all such other respects and to such extent as may be permissible. In addition, any such invalidity, illegality or unenforceability shall not affect any other provisions of this Note, but this Note shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

This Note inures to the benefit of Lender and binds Borrower and Lender's and Borrower's respective successors and assigns, and the words "Lender" and "Borrower" whenever occurring herein shall be deemed and construed to include such respective successors and assigns.

This Promissory Note is one of the promissory notes referred to in the Financial Services Agreement dated as of June 15, 2000 between Borrower and Lender to which reference is made for a statement of additional rights and obligations of Lender and Borrower.

IN WITNESS WHEREOF, Borrower has executed this Promissory Note the day and year first written above.

Arizona-American Water Company

Name and Title: Vice President Finance & Treasurer

Chris Buls

## PROMISSORY NOTE FOR LONG-TERM BORROWINGS 5.52% Maturity - December 21, 2016

\$11,200,000

**December 21, 2006** 

FOR VALUE RECEIVED, Arizona-American Water Company, an Arizona corporation (herein "Borrower") hereby promises to pay to the order of American Water Capital Corp., a Delaware corporation ("Lender"), in same day funds at its offices at 1025 Laurel Oak Rd. Voorhees, NJ 08043 or such other place as Lender may from time to time designate, the principal sum of Eleven Million Two-Hundred Thousand dollars (\$11,200,000), together with interest thereon from the date hereof until paid in full. Interest shall be charged on the unpaid outstanding principal balance hereof at a rate per annum equal to the rate paid and to be paid by Lender with respect to the borrowings it made in order to provide funds to Borrower hereunder. Interest on borrowings shall be due and payable in immediately available funds on the same business day on which the Lender must pay interest on the borrowings it made in order to provide funds to the Borrower hereunder. The principal amount hereof shall be due and payable hereunder at such times and in such amounts and in such installments hereunder as the Lender must pay with respect to the borrowings it made in order to provide funds to the Borrower hereunder. Lender has provided Borrower with a copy of the documentation evidencing the borrowings made by Lender in order to provide funds to Borrower hereunder. In the absence of manifest error, such documentation and the records maintained by Lender of the amount and term, if any, of borrowings hereunder shall be deemed conclusive.

The occurrence of one or more of any of the following shall constitute an event of default hereunder:

- (a) Borrower shall fail to make any payment of principal and/or interest due hereunder or under any other promissory note between Lender and Borrower within five business days after the same shall become due and payable, whether at maturity or by acceleration or otherwise;
- (b) Borrower shall apply for or consent to the appointment of a receiver, trustee or liquidator of itself or any of its property, admit in writing its inability to pay its debts as they mature, make a general assignment for the benefit of creditors, be adjudicated a bankrupt or insolvent or file a voluntary petition in bankruptcy or a petition or an answer seeking reorganization or an arrangement with creditors or to take advantage of any bankruptcy, reorganization, insolvency, readjustment of debt, dissolution or liquidation of law or statute, or an answer admitting the material allegations of a petition filed against it in any proceeding under any such law, or if action shall be taken by Borrower for the purposes of effecting any of the foregoing; or
- (c) Any order, judgment or decree shall be entered by any court of competent jurisdiction, approving a petition seeking reorganization of Borrower or all or a substantial part of the assets of Borrower, or appointing a receiver, trustee or liquidator of Borrower or any of its property, and such order, judgment or decree shall continue unstayed and in effect for any period of sixty (60) days.

Upon the occurrence of any event of default, the entire unpaid principal sum hereunder plus all interest accrued thereon plus all other sums due and payable to Lender hereunder shall, at the option of Lender, become due and payable immediately. In addition to the foregoing, upon the occurrence of any event of default, Lender may forthwith exercise singly, concurrently, successively or otherwise any and all rights and remedies available to Lender by law, equity, statute or otherwise.

Borrower hereby waivers presentment, demand, notice of nonpayment, protest, notice of protest or other notice of dishonor in connection with any default in the payment of, or any enforcement of the payment of, all amounts due hereunder. To the extent permitted by law, Borrower waives the right to any stay of execution and the benefit of all exemption laws now or hereafter in effect.

Following the occurrence of any event of default, Borrower will pay upon demand all costs and expenses (including all amounts paid to attorneys, accountants, and other advisors employed by Lender), incurred by Lender in the exercise of any of its rights, remedies or powers hereunder with respect to such event of default, and any amount thereof not paid promptly following demand therefor shall be added to the principal sum hereunder and will bear interest at the contract rate set forth herein from the date of such demand until paid in full. In connection with and as part of the foregoing, in the event that this Note is placed in the hands of an attorney for the collection of any sum payable hereunder, Borrower agrees to pay reasonable attorneys' fees for the collection of the amount being claimed hereunder, as well as all costs, disbursements and allowances provided by law.

If for any reason one or more of the provisions of this Note or their application to any entity or circumstances shall be held to be invalid, illegal or unenforceable in any respect or to any extent, such provisions shall nevertheless remain valid, legal and enforceable in all such other respects and to such extent as may be permissible. In addition, any such invalidity, illegality or unenforceability shall not affect any other provisions of this Note, but this Note shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

This Note inures to the benefit of Lender and binds Borrower and Lender's and Borrower's respective successors and assigns, and the words "Lender" and "Borrower" whenever occurring herein shall be deemed and construed to include such respective successors and assigns.

This Promissory Note is one of the promissory notes referred to in the Financial Services Agreement dated as of June 15, 2000 between Borrower and Lender to which reference is made for a statement of additional rights and obligations of Lender and Borrower.

IN WITNESS WHEREOF, Borrower has executed this Promissory Note the day and year first written above.

Arizona-American Water Company

: (Montagle C. Bod)
Name and Title: Vice President Finance & Trensurer

Chris Buls

# PROMISSORY NOTE FOR LONG-TERM BORROWINGS 5.62% Maturity - December 21, 2018

\$123,100,000

**December 21, 2006** 

FOR VALUE RECEIVED, Arizona-American Water Company, an Arizona corporation (herein "Borrower") hereby promises to pay to the order of American Water Capital Corp., a Delaware corporation ("Lender"), in same day funds at its offices at 1025 Laurel Oak Rd. Voorhees, NJ 08043 or such other place as Lender may from time to time designate, the principal sum of One-Hundred Twenty Three Million One-Hundred Thousand dollars (\$123,100,000), together with interest thereon from the date hereof until paid in full. Interest shall be charged on the unpaid outstanding principal balance hereof at a rate per annum equal to the rate paid and to be paid by Lender with respect to the borrowings it made in order to provide funds to Borrower hereunder. Interest on borrowings shall be due and payable in immediately available funds on the same business day on which the Lender must pay interest on the borrowings it made in order to provide funds to the Borrower hereunder. The principal amount hereof shall be due and payable hereunder at such times and in such amounts and in such installments hereunder as the Lender must pay with respect to the borrowings it made in order to provide funds to the Borrower hereunder. Lender has provided Borrower with a copy of the documentation evidencing the borrowings made by Lender in order to provide funds to Borrower hereunder. In the absence of manifest error, such documentation and the records maintained by Lender of the amount and term, if any, of borrowings hereunder shall be deemed conclusive.

The occurrence of one or more of any of the following shall constitute an event of default hereunder:

- (a) Borrower shall fail to make any payment of principal and/or interest due hereunder or under any other promissory note between Lender and Borrower within five business days after the same shall become due and payable, whether at maturity or by acceleration or otherwise;
- (b) Borrower shall apply for or consent to the appointment of a receiver, trustee or liquidator of itself or any of its property, admit in writing its inability to pay its debts as they mature, make a general assignment for the benefit of creditors, be adjudicated a bankrupt or insolvent or file a voluntary petition in bankruptcy or a petition or an answer seeking reorganization or an arrangement with creditors or to take advantage of any bankruptcy, reorganization, insolvency, readjustment of debt, dissolution or liquidation of law or statute, or an answer admitting the material allegations of a petition filed against it in any proceeding under any such law, or if action shall be taken by Borrower for the purposes of effecting any of the foregoing; or
- (c) Any order, judgment or decree shall be entered by any court of competent jurisdiction, approving a petition seeking reorganization of Borrower or all or a substantial part of the assets of Borrower, or appointing a receiver, trustee or liquidator of Borrower or any of its property, and such order, judgment or decree shall continue unstayed and in effect for any period of sixty (60) days.

Upon the occurrence of any event of default, the entire unpaid principal sum hereunder plus all interest accrued thereon plus all other sums due and payable to Lender hereunder shall, at the option of Lender, become due and payable immediately. In addition to the foregoing, upon the occurrence of any event of default, Lender may forthwith exercise singly, concurrently, successively or otherwise any and all rights and remedies available to Lender by law, equity, statute or otherwise.

Borrower hereby waivers presentment, demand, notice of nonpayment, protest, notice of protest or other notice of dishonor in connection with any default in the payment of, or any enforcement of the payment of, all amounts due hereunder. To the extent permitted by law, Borrower waives the right to any stay of execution and the benefit of all exemption laws now or hereafter in effect.

Following the occurrence of any event of default, Borrower will pay upon demand all costs and expenses (including all amounts paid to attorneys, accountants, and other advisors employed by Lender), incurred by Lender in the exercise of any of its rights, remedies or powers hereunder with respect to such event of default, and any amount thereof not paid promptly following demand therefor shall be added to the principal sum hereunder and will bear interest at the contract rate set forth herein from the date of such demand until paid in full. In connection with and as part of the foregoing, in the event that this Note is placed in the hands of an attorney for the collection of any sum payable hereunder, Borrower agrees to pay reasonable attorneys' fees for the collection of the amount being claimed hereunder, as well as all costs, disbursements and allowances provided by law.

If for any reason one or more of the provisions of this Note or their application to any entity or circumstances shall be held to be invalid, illegal or unenforceable in any respect or to any extent, such provisions shall nevertheless remain valid, legal and enforceable in all such other respects and to such extent as may be permissible. In addition, any such invalidity, illegality or unenforceability shall not affect any other provisions of this Note, but this Note shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

This Note inures to the benefit of Lender and binds Borrower and Lender's and Borrower's respective successors and assigns, and the words "Lender" and "Borrower" whenever occurring herein shall be deemed and construed to include such respective successors and assigns.

This Promissory Note is one of the promissory notes referred to in the Financial Services Agreement dated as of June 15, 2000 between Borrower and Lender to which reference is made for a statement of additional rights and obligations of Lender and Borrower.

IN WITNESS WHEREOF, Borrower has executed this Promissory Note the day and year first written above.

Arizona-American Water Company

. Unough L. BMS

Name and Title: Vice President Finance of Treasurer

Chris Buls



### Selected Yields

	Recent (2/28/07)	3 Months Ago (11/29/06)	Year Ago (3/02/06)		Recent (2/28/07)	3 Months Ago (11/29/06)	Year Ago (3/02/06
TAXABLE							
Market Rates				Mortgage-Backed Securities			
Discount Rate	6.25	6.25	5.50	GNMA 6.5%	5.63	5.57	5.45
Federal Funds	5.25	5.25	4.50	FHLMC 6.5% (Gold)	5.73	5.76	5.91
Prime Rate	8.25	8.25	7.50	FNMA 6.5%	5.63	5.69	5.75
30-day CP (A1/P1)	5.23	5.24	4.54	FNMA ARM	5.60	5.66	4.53
3-month LIBOR	5.35	5.37	4.84	Corporate Bonds			
Bank CDs				Financial (10-year) A	5.38	5.45	5.52
6-month	3.28	3.28	2.94	Industrial (25/30-year) A	5.62	5.62	5.69
1-year	3.88	3.88	3.47	Utility (25/30-year) A	5.65	5.63	5.66
5-year	3.92	3.95	3.94	Utility (25/30-year) Baa/BBB	5.89	5.95	6.01
U.S. Treasury Securities				Foreign Bonds (10-Year)			
3-month	5.12	5.03	4.59	Canada	4.03	3.94	4.19
6-month	5.11	5.12	4.74	Germany	3.96	3.72	3.57
1-year	4.93	4.98	4.74	Japan	1.64	1.69	1.65
5-year	4.52	4.52	4.66	United Kingdom	4.80	4.55	4.23
10-year	4.57	4.52	4.63	Preferred Stocks			
10-year (inflation-protecte	ed) 2.19	2.22	2.02	Utility A	7.22	7.08	7.11
30-year	4.68	4.61	4.61	Financial A	6.35	6.33	6.27
30-year Zero	4.61	4.55	4.47	Financial Adjustable A	5.53	5.53	N/A
Тиорения Соль	tw Viold	Curvo		TAX-EXEMPT			
Treasury Securi	ity rieid	Curve		Bond Buyer Indexes			
5.20%				20-Bond Index (GOs)	4.19	4.14	4.39
$\vdash$				25-Bond Index (Revs)	4.48	4.60	5.07
5.00% -				General Obligation Bonds (G	Os)		
				1-year Aaa	3.56	3.50	3.35
\				1-year A	3.66	3.60	3.47
4.80%				5-year Aaa	3.55	3.46	3.50
				5-year A	3.64	3.75	3.78
/    <b>\</b>				10-year Aaa	3.67	3.63	3.85
4.60% -				10-year A	4.20	4.04	4.17
				25/30-year Aaa	3.97	3.96	4.36
4 400(				25/30-year A	4.28	4.28	4.63
4.40% -				Revenue Bonds (Revs) (25/30-Ye		1.20	1.00
		—Cur		Education AA	4.39	4.14	4.38
4.20%		— Yea	r-Ago	Electric AA	4.38	4.14	4.44
3 6 1 2 3 5	10		30	Housing AA	4.44	4.15	4.44
Mos. Years							

### Federal Reserve Data

Toll Road Aaa

4.39

4.23

4.57

#### **BANK RESERVES**

(Two-Week Period; in Millions, Not Seasonally Adjusted)

		Recent Levels		Averag	e Leveis Ove	r the Last
	2/14/07	1/31/07	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	1227	1281	-54	1621	1637	1654
Borrowed Reserves	30	265	-235	167	242	228
Net Free/Borrowed Reserves	1197	1016	181	1454	1395	1425

#### **MONEY SUPPLY**

(One-Week Period; in Billions, Seasonally Adjusted)

·		Recent Levels	,	Growth	Rates Over	the Last
	2/12/07	2/5/07	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1361.8	1390.6	-28.8	0.4%	0.2%	-0.3%
M2 (M1+savings+small time deposits)	7097.3	7092.5	4.8	8.2%	7.5%	5.6%

# ARIZONA-AMERICAN WATER COMPANY ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS DOCKET NO. WS-01303A-06-0403 TABLE OF CONTENTS TO SCHEDULES WAR

#### SCHEDULE #

#### **WEIGHTED COST OF CAPITAL - ANTHEM WATER**

			(A)	(	(B)		(C) RUCO	(D)	(E)	(F)
LINE NO.	DESCRIPTION		PITALIZATION R COMPANY		JCO TMENTS	-	ADJUSTED PITALIZATION	CAPITAL RATIO	COST	WEIGHTED COST
1	DEBT	\$	25,860,370	\$	-	\$	25,860,370	60.00%	5.37%	3.22%
2	PREFERRED STOCK		-		-		-	0.00%	0.00%	0.00%
3	COMMON EQUITY		17,240,246				17,240,246	40.00%	10.27%	4.11%
4	TOTAL CAPITALIZATION	\$	43,100,616	\$		\$	43,100,616	100.00%		
5	WEIGHTED COST OF CAP	'ITAL								7.33%

#### WEIGHTED COST OF CAPITAL - ANTHEM/AGUA FRIA WASTEWATER

			(A)		(B)		(C) RUCO	(D)	(E)	(F)
LINE		CAF	PITALIZATION	R	UCO	P	ADJUSTED	CAPITAL		WEIGHTED
<u>NO.</u>	DESCRIPTION	PEI	R COMPANY	ADJUS	STMENTS	CAF	PITALIZATION	RATIO	COST	COST
1	DEBT	\$	14,781,695	\$	-	\$	14,781,695	60.00%	5.37%	3.22%
2	PREFERRED STOCK		-		-		-	0.00%	0.00%	0.00%
3	COMMON EQUITY		9,854,463				9,854,463	40.00%	10.27%	4.11%
4	TOTAL CAPITALIZATION	\$	24,636,158	\$		\$	24,636,158	100.00%		

#### 5 WEIGHTED COST OF CAPITAL

7.33%

**REFERENCES**:

COLUMN (A): COMPANY SCHEDULE D-1

COLUMN (B): TESTIMONY, WAR

COLUMN (C): COLUMN (A) + COLUMN (B)

COLUMN (D): COLUMN (C) ÷ COLUMN (C), LINE 4

COLUMN (E): LINE 1 - SCHEDULE WAR-1, PAGE 2; LINE 3 - TESTIMONY, WAR

COLUMN (F): COLUMN (D) x COLUMN (E)

# ARIZONA-AMERICAN WATER COMPANY ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS TEST YEAR ENDED DECEMBER 31, 2005 COST OF CAPITAL SUMMARY

DOCKET NO. WS-01303A-06-0403 SCHEDULE WAR - 1, PAGE 2 OF 3

#### **WEIGHTED COST OF DEBT**

	(A)	(B)	(C)	(D)	(E)	(F)
LINE NO.	DESCRIPTION	BALANCE	ANNUAL INTEREST	INTEREST RATE	BALANCE RATIOS	WEIGHTED COST OF DEBT
1	AUG '08 L-T SENIOR NOTES	\$ 4,500,000	\$ 320,490	7.122%	2.26%	0.161%
2	SEP '30 L-T PROMISSORY NOTE	25,000,000	1,230,000	4.920%	12.54%	0.617%
3	SEP '28 L-T NOTE - MARICOPA	10,635,000	264,427	2.486%	5.34%	0.133%
4	SEP '13 PILR - MONTEREY	51,711	3,237	6.260%	0.03%	0.002%
5	AUG '15 PILR - ROSALEE	51,822	3,721	7.180%	0.03%	0.002%
6	AUG '15 PILR - T.O. DEVELOPMENT	43,703	3,137	7.178%	0.02%	0.002%
7	SEP '13 PILR - MONTEX/LINCOLN	27,840	1,604	5.760%	0.01%	0.001%
8	DEC '13 L-T PROMISSORY NOTE	24,700,000	1,331,330	5.390%	12.39%	0.668%
9	DEC '16 L-T PROMISSORY NOTE	11,200,000	618,240	5.520%	5.62%	0.310%
10	DEC '18 L-T PROMMISSORY NOTE	123,100,000	6,918,220	5.620%	61.76%	3.471%
11						
12	TOTALS	\$ 199,310,076	\$ 10,694,405		100.00%	
13						
	WEIGHTED COOT OF BEDT					5.070/

#### 14 WEIGHTED COST OF DEBT

5.37%

#### **REFERENCES**:

COLUMN (A) LINES 1 THRU 7: COMPANY SCHEDULE D-1, PAGE 2

COLUMN (B) LINES 1 THRU 7: COMPANY SCHEDULE D-1, PAGE 2

COLUMN (C) LINES 1 THRU 7: COMPANY SCHEDULE D-1, PAGE 2

COLUMN (A) LINES 8 THRU 10: DECISION NO. 68994 COMPLIANCE REPORT FILED ON JANUARY 8, 2007

COLUMN (B) LINES 8 THRU 10: DECISION NO. 68994 COMPLIANCE REPORT FILED ON JANUARY 8, 2007

COLUMN ( C ) LINES 8 THRU 10: COLUMN (B) x COLUMN (D)  $\,$ 

COLUMN (D) LINES 1 THRU 7: COLUMN (C)  $\div$  COLUMN (D)

COLUMN (D) LINES 8 THRU 10: DECISION NO. 68994 COMPLIANCE REPORT FILED ON JANUARY 8, 2007

COLUMN (E): COLUMN (A) LINES 1 THRU 10 ÷ LINE 12

COLUMN (F): COLUMN (D) x COLUMN (E)

#### ARIZONA-AMERICAN WATER COMPANY ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS TEST YEAR ENDED DECEMBER 31, 2005 COST OF CAPITAL SUMMARY

DOCKET NO. WS-01303A-06-0403 SCHEDULE WAR - 1 PAGE 3 OF 3

#### **COST OF COMMON EQUITY CALCULATION**

<u>NO.</u>		

LINE

<u>110.</u>			
1	DCF METHODOLOGY		
2	DCF - WATER COMPANY SINGLE-STAGE CONSTANT GROWTH MODEL ESTIMATE	8.81%	SCHEDULE WAR-2, COLUMN (C), LINE 5
3	DCF - NATURAL GAS LDC SINGLE-STAGE CONSTANT GROWTH MODEL ESTIMATE	9.18%	SCHEDULE WAR-2, COLUMN (C), LINE 13
4	AVERAGE OF CAPM ESTIMATES	8.99%	( LINE 2 + LINE 3 ) ÷ 2
5	CAPM METHODOLOGY		
6	CAPM - WATER COMPANY GEOMETRIC MEAN ESTIMATE	9.74%	SCHEDULE WAR-7 PAGE 1, COLUMN (B), LINE 5
7	CAPM - NATURAL GAS LDC GEOMETRIC MEAN ESTIMATE	9.69%	SCHEDULE WAR-7 PAGE 1, COLUMN (B), LINE 13
8	CAPM - WATER COMPANY ARITHMETIC MEAN ESTIMATE	11.40%	SCHEDULE WAR-7 PAGE 2, COLUMN (B), LINE 5
9	CAPM - NATURAL GAS LDC ARITHMETIC MEAN ESTIMATE	11.33%	SCHEDULE WAR-7 PAGE 2, COLUMN (B), LINE 13
10	AVERAGE OF CAPM ESTIMATES	10.54%	( SUM OF LINES 6 THRU ) ÷ 4
11	AVERAGE OF DCF AND CAPM ESTIMATES	9.77%	( LINE 4 + LINE 10 ) ÷ 2
12	ADD: 50 BASIS POINT ADJUSTMENT FOR DEBT LEVERAGE	0.50%	TESTIMONY WAR
13	COST OF COMMON EQUITY ESTIMATE	10.27%	LINE 11 + LINE 12

#### ARIZONA-AMERICAN WATER COMPANY ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS TEST YEAR ENDED DECEMBER 31, 2005 DCF COST OF EQUITY CAPITAL

LINE NO.	STOCK SYMBOL	COMPANY	(A) DIVIDEND YIELD	+	(B) GROWTH RATE (g)	=	(C) DCF COST OF EQUITY CAPITAL
1	AWR	AMERICAN STATES WATER CO.	2.44%	+	7.66%	=	10.11%
2	CWT	CALIFORNIA WATER SERVICE GROUP	2.88%	+	5.86%	=	8.74%
3	SWWC	SOUTHWEST WATER COMPANY	1.80%	+	5.37%	=	7.17%
4	WTR	AQUA AMERICA, INC.	2.03%	+	7.18%	=	9.21%
5	WATER COMP	PANY AVERAGE					8.81%
6	ATG	AGL RESOURCES, INC.	4.05%	+	5.98%	=	10.03%
7	ATO	ATMOS ENERGY CORP.	4.03%	+	5.54%	=	9.57%
8	LG	LACLEDE GROUP, INC.	4.53%	+	3.77%	=	8.30%
9	NJR	NEW JERSEY RESOURCES CORPORATION	3.14%	+	6.13%	=	9.27%
10	GAS	NICOR, INC.	4.05%	+	3.71%	=	7.76%
11	NWN	NORTHWEST NATURAL GAS CO.	3.37%	+	5.07%	=	8.44%
12	PNY	PIEDMONT NATURAL GAS COMPANY	3.68%	+	3.69%	=	7.37%
13	SJI	SOUTH JERSEY INDUSTIES, INC.	2.85%	+	11.13%	=	13.98%
14	SWX	SOUTHWEST GAS CORPORATION	2.24%	+	7.22%	=	9.47%
15	WGL	WGL HOLDINGS, INC.	4.29%	+	3.33%	=	7.63%
16	NATURAL GA	S LDC AVERAGE					9.18%

#### REFERENCES:

COLUMN (A): SCHEDULE WAR - 3, COLUMN C

COLUMN (B): SCHEDULE WAR - 4, PAGE 1, COLUMN C

COLUMN (C): COLUMN (A) + COLUMN (B)

			(A) ESTIMATED		(B) AVERAGE		(C)
LINE NO.	STOCK SYMBOL	COMPANY	DIVIDEND (PER SHARE)	÷	STOCK PRICE (PER SHARE)	=	DIVIDEND YIELD
<u>INO.</u>	STINIBOL	COMPANI	(FER SHARE)	•	(FER SHARE)	_	TILLD
1	AWR	AMERICAN STATES WATER CO.	\$0.94	÷	\$38.45	=	2.44%
2	CWT	CALIFORNIA WATER SERVICE GROUP	1.15	÷	39.96	=	2.88%
3	SWWC	SOUTHWEST WATER COMPANY	0.23	÷	12.87	=	1.80%
4	WTR	AQUA AMERICA, INC.	0.46	÷	22.65	=	2.03%
5	WATER COMPAN	NY AVERAGE					2.29%
6	ATG	AGL RESOURCES, INC.	\$1.64	÷	\$40.48	=	4.05%
7	ATO	ATMOS ENERGY CORP.	1.28	÷	31.75		4.03%
8	LG	LACLEDE GROUP, INC.	1.46	÷	32.23	=	4.53%
9	NJR	NEW JERSEY RESOURCES CORPORATION	1.52	÷	48.38		3.14%
10	GAS	NICOR, INC.	1.86	÷	45.97		4.05%
11	NWN	NORTHWEST NATURAL GAS CO.	1.42	÷	42.18	=	3.37%
12	PNY	PIEDMONT NATURAL GAS COMPANY	0.96	÷	26.09	=	3.68%
13	SJI	SOUTH JERSEY INDUSTIES, INC.	0.96	÷	33.70	=	2.85%
14	SWX	SOUTHWEST GAS CORPORATION	0.86	÷	38.33	=	2.24%
15	WGL	WGL HOLDINGS, INC.	1.36	÷	31.70	=	4.29%
16	NATURAL GAS L	DC AVERAGE					3.62%

#### **REFERENCES:**

COLUMN (A): ESTIMATED 12 MONTH DIVIDEND REPORTED IN VALUE LINE INVESTMENT

SURVEY - RATINGS & REPORTS DATED 01/26/2007 (WATER COMPANIES) AND 03/16/2007 (NATURAL GAS LDC's).

COLUMN (B): EIGHT WEEK AVERAGE OF CLOSING PRICES FROM 01/16/2007 TO 03/09/2007

STOCK QUOTES OBTAINED THROUGH BIG CHARTS WEB SITE - HISTORICAL QUOTES (www.bigcharts.com).

COLUMN (C): COLUMN (A) ÷ COLUMN (B)

LINE	OTOO!		(A) INTERNAL		(B) EXTERNAL		(C) DIVIDEND
LINE <u>NO.</u>	STOCK SYMBOL	COMPANY	GROWTH ( br )	+	GROWTH (sv)	_ = _	GROWTH (g)
1	AWR	AMERICAN STATES WATER CO.	5.00%	+	2.66%	=	7.66%
2	CWT	CALIFORNIA WATER SERVICE GROUP	3.25%	+	2.61%	=	5.86%
3	SWWC	SOUTHWEST WATER COMPANY	4.45%	+	0.92%	=	5.37%
4	WTR	AQUA AMERICA, INC.	6.00%	+	1.18%	=	7.18%
5	WATER COM	PANY AVERAGE					6.52%
6	ATG	AGL RESOURCES, INC.	5.75%	+	0.23%	=	5.98%
7	ATO	ATMOS ENERGY CORP.	4.50%	+	1.04%	=	5.54%
8	LG	LACLEDE GROUP, INC.	3.00%	+	0.77%	=	3.77%
9	NJR	NEW JERSEY RESOURCES CORPORATION	5.50%	+	0.63%	=	6.13%
10	GAS	NICOR, INC.	3.65%	+	0.06%	=	3.71%
11	NWN	NORTHWEST NATURAL GAS CO.	4.75%	+	0.32%	=	5.07%
12	PNY	PIEDMONT NATURAL GAS COMPANY	3.25%	+	0.44%	=	3.69%
13	SJI	SOUTH JERSEY INDUSTIES, INC.	10.50%	+	0.63%	=	11.13%
14	SWX	SOUTHWEST GAS CORPORATION	6.25%	+	0.97%	=	7.22%
15	WGL	WGL HOLDINGS, INC.	3.25%	+	0.08%	=	3.33%
16	NATURAL GA	AS LDC AVERAGE					5.56%

REFERENCES:

COLUMN (A): TESTIMONY, WAR

COLUMN (B): SCHEDULE WAR - 4, PAGE 2, COLUMN C

COLUMN (C): COLUMN (A) + COLUMN (B)

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LINE	STOCK		(A) SHARE					(B)								(C) EXTERNAL GROWTH
NO.	SYMBOL	COMPANY	GROWTH	х	))]}	Μ÷Β	) +	1	) -	÷ 2	2 ]	] -	1	}	=	(sv)
1	AWR	AMERICAN STATES WATER CO.	4.00%	x	) ] }	2.33	) +	1	) -	÷ 2	2 ]	] -	1	}	=	2.66%
2	CWT	CALIFORNIA WATER SERVICE GROUP	3.75%	x	) ] }	2.39	) +	1	) -	÷ 2	2 ]	] -	1	}	=	2.61%
3	SWWC	SOUTHWEST WATER COMPANY	2.00%	x	) ] }	1.92	) +	1	) -	÷ 2	2 ]	] -	1	}	=	0.92%
4	WTR	AQUA AMERICA, INC.	1.00%	x	) ] }	3.36	) +	1	) -	+ 2	2 ]	] -	1	}	=	1.18%
5	WATER COMF	PANY AVERAGE														1.84%
6	ATG	AGL RESOURCES, INC.	0.50%	x	) ] }	1.93	) +	1	) -	+ 2	2 ]	] -	1	}	=	0.23%
7	ATO	ATMOS ENERGY CORP.	5.00%	x	) ] }	1.41	) +	1	) -	+ 2	2 ]	] -	1	}	=	1.04%
8	LG	LACLEDE GROUP, INC.	2.75%	x	) ] }	1.56	) +	1	) -	+ 2	2 ]	] -	1	}	=	0.77%
9	NJR	NEW JERSEY RESOURCES CORPORATION	1.25%	x	) ) ] }	2.01	) +	1	) -	÷ 2	2 ]	] -	1	}	=	0.63%
10	GAS	NICOR, INC.	0.10%	X	) ] }	2.24	) +	1	) -	÷ 2	2 ]	] -	1	}	=	0.06%
11	NWN	NORTHWEST NATURAL GAS CO.	0.75%	x	) ) ] }	1.86	) +	1	) -	+ 2	2 ]	] -	1	}	=	0.32%
12	PNY	PIEDMONT NATURAL GAS COMPANY	0.75%	x	) ] }	2.17	) +	1	) -	+ 2	2 ]	] -	1	}	=	0.44%
13	SJI	SOUTH JERSEY INDUSTIES, INC.	1.15%	X	) ] }	2.10	) +	1	) -	÷ 2	2 ]	] -	1	}	=	0.63%
14	SWX	SOUTHWEST GAS CORPORATION	2.65%	x	) ] }	1.73	) +	1	) -	+ 2	2 ]	] -	1	}	=	0.97%
15	WGL	WGL HOLDINGS, INC.	0.25%	x	) ] }	1.68	) +	1	) -	÷ 2	2 ]	] -	1	}	=	0.08%
16	NATURAL GA	S LDC AVERAGE														0.52%

#### REFERENCES:

COLUMN (A): TESTIMONY, WAR

COLUMN (B): VALUE LINE INVESTMENT SURVEY

- RATINGS & REPORTS DATED 01/26/2007 (WATER COMPANIES) AND 03/16/2007 (NATURAL GAS LDC's)

COLUMN (C): COLUMN (A) x COLUMN (B)

LINE NO.	STOCK SYMBOL	WATER COMPANY NAME	OPERATING PERIOD	(A) RETENTION RATIO (b) x	(B) RETURN ON BOOK EQUITY (r) =	(C) DIVIDEND GROWTH (g)	(D) BOOK VALUE (\$/SHARE)	(E) SHARES OUTST. (MILLIONS)	(F) SHARE GROWTH
1 2 3 4 5 6 7 8 9	AWR	AMERICAN STATES WATER CO.	2001 2002 2003 2004 2005 GROWTH 2001 - 2005 2006 2007 2009-11	0.3556 0.3507 -0.1282 0.1524 0.3182 0.3158 0.3733 0.4842	10.10% 9.50% 5.60% 6.60% 8.50% 8.50% 10.00%	3.59% 3.33% NMF 1.01% 2.70% 2.66% 2.68% 3.17% 4.84%	13.22 14.05 13.97 15.01 15.72 4.50%	15.12 15.18 15.21 16.75 16.80 17.50 18.25 20.50	2.67% 4.17% 4.23% 4.06%
11 12 13 14 15 16 17 18 19 20	CWT	CALIFORNIA WATER SERVICE GROUP	2001 2002 2003 2004 2005 GROWTH 2001 - 2005 2006 2007 2009-11	-0.1915 0.1040 0.0744 0.2260 0.2245 0.3030 0.3371 0.3222	7.20% 9.50% 7.90% 9.00% 9.30% 9.50% 10.50% 9.00%	NMF 0.99% 0.59% 2.03% <u>2.09%</u> 1.42% 2.88% 3.54% 2.90%	12.95 13.12 14.44 15.66 15.98 1.50%	15.18 15.18 16.93 18.37 18.39 19.00 19.50 22.00	4.91% 3.32% 2.97% 3.65%
21 22 23 24 25 26 27 28 29	SWWC	SOUTHWEST WATER COMPANY	2001 2002 2003 2004 2005 GROWTH 2001 - 2005 2006 2007 2009-11	0.6667 0.6154 0.6364 0.2174 0.4118 0.3784 0.4444 0.5571	11.40% 9.70% 9.10% 3.60% 5.00% 5.00% 6.50% 8.00%	7.60% 5.97% 5.79% 0.78% <u>2.06%</u> 4.44% 1.89% 2.89% 4.46%	3.84 4.27 4.90 6.17 <u>6.49</u> 14.00%	14.17 14.35 16.17 20.36 22.33 23.00 23.00 24.00	12.04% 3.00% 1.49% 1.45%
31 32 33 34 35 36 37 38 39	WTR	AQUA AMERICA, INC.	2001 2002 2003 2004 2005 GROWTH 2001 - 2005 2006 2007 2009-11	0.4118 0.4074 0.3860 0.4219 0.4366 0.4133 0.4235 0.4500	12.40% 12.70% 10.20% 10.70% 11.20% 11.50% 13.50%	5.11% 5.17% 3.94% 4.51% 4.89% 4.72% 4.75% 4.87% 6.08%	4.15 4.36 5.34 5.89 6.30 11.00%	113.97 113.19 123.45 127.18 128.97 130.00 131.00 134.00	3.14% 0.80% 0.78% 0.77%

#### REFERENCES:

COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 01/26/2007

COLUMN (C): COLUMN (A) x COLUMN (B)

COLUMN (C): LINES 6, 16 & 26, SIMPLE AVERAGE GROWTH, 2001 - 2005

COLUMN (D): VALUE LINE INVESTMENT SURVEY

COLUMN (D): LINES 6, 16 & 26, COMPOUND GROWTH RATE

COLUMN (E): VALUE LINE INVESTMENT SURVEY

COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

				(A)	(B)	(C)	(D)	(E)	(F)
LINE	STOCK		OPERATING	RETENTION	RETURN ON	DIVIDEND	BOOK VALUE	SHARES OUTST.	SHARE
<u>NO.</u>	SYMBOL	NATURAL GAS LDC NAME	PERIOD	RATIO (b) x	BOOK EQUITY (r) =	GROWTH (g)	(\$/SHARE)	(MILLIONS)	GROWTH
1	ATG	AGL RESOURCES, INC.	2002	0.4066	14.50%	5.90%	12.52	56.70	
2	7110	AGE RESOURCES, IIVO.	2003	0.4663	14.00%	6.53%	14.66	64.50	
3			2004	0.4956	11.00%	5.45%	18.06	76.70	
4			2005	0.4758	12.90%	6.14%	19.29	77.70	
5			2006	0.4559	13.00%	5.93%	20.69	<u>77.75</u>	
6			GROWTH 2002 - 2006			5.99%	8.50%		8.21%
7			2007	0.4143	13.50%	5.59%		78.00	0.32%
8			2008	0.4345	14.00%	6.08%		79.00	0.80%
9			2010-12	0.4194	14.00%	5.87%	2.50%	80.00	0.57%
10									
11	ATO	ATMOS ENERGY CORP.	2002	0.1862	10.40%	1.94%	13.75	41.68	
12			2003	0.2982	9.30%	2.77%	16.66	51.48	
13			2004	0.2278	7.60%	1.73%	18.05	62.80	
14			2005	0.2791	8.50%	2.37%	19.90	80.54	
15			2006	0.3700	9.90%	<u>3.66%</u>	<u>20.16</u>	<u>81.74</u>	
16			GROWTH 2002 - 2006			2.50%	8.50%		18.34%
17			2007	0.3600	9.00%	3.24%		89.50	9.49%
18			2008	0.3810	9.50%	3.62%		92.50	6.38%
19			2010-12	0.4600	10.00%	4.60%	4.00%	107.00	5.53%
20									
21	LG	LACLEDE GROUP, INC.	2002	-0.1356	7.80%	NMF	15.07	18.96	
22			2003	0.2637	11.60%	3.06%	15.65	19.11	
23			2004	0.2582	10.10%	2.61%	16.96	20.98	
24			2005	0.2789	10.90%	3.04%	17.31	21.17	
25			2006	0.4093	12.50%	<u>5.12%</u>	<u>18.85</u>	<u>21.36</u>	2.000/
26 27			GROWTH 2002 - 2006 2007	0.2368	9.00%	3.46% 2.13%	3.50%	21.50	3.02% 0.66%
28			2007	0.2550	9.50%			22.00	
26 29			2010-12	0.2550	10.00%	2.42% 3.19%	5.00%	25.00 25.00	1.49% 3.20%
30			2010-12	0.3191	10.00%	3.19%	5.00%	25.00	3.20%
31	NJR	NEW JERSEY RESOURCES CORPORATION	1 2002	0.4258	15.70%	6.69%	13.06	27.67	
32	NJIX	NEW JERSET RESOURCES CORFORATION	2003	0.4790	15.60%	7.47%	15.38	27.23	
33			2003	0.4902	15.30%	7.50%	16.87	27.74	
34			2005	0.4868	17.00%	8.28%	15.90	27.55	
35			2006	0.4857	12.60%	6.12%	22.50	27.63	
36			GROWTH 2002 - 2006		12.5570	7.21%	8.50%	<u>21.00</u>	-0.04%
37			2007	0.4759	12.50%	5.95%	3.3370	28.00	1.34%
38			2008	0.4800	12.00%	5.76%		28.50	1.56%
39			2010-12	0.4667	11.00%	5.13%	8.00%	29.50	1.32%

#### REFERENCES:

COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS DATED 03/16/2007

COLUMN (C): COLUMN (A) x COLUMN (B)

COLUMN (C): LINES 6, 16 & 26, SIMPLE AVERAGE GROWTH, 2001 - 2005

COLUMN (D): VALUE LINE INVESTMENT SURVEY

COLUMN (D): LINES 6, 16 & 26, COMPOUND GROWTH RATE

COLUMN (E): VALUE LINE INVESTMENT SURVEY

COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

LINE	STOCK		OPERATING	(A) RETENTION	(B) RETURN ON	(C) DIVIDEND	(D) BOOK VALUE	(E) SHARES OUTST.	(F) SHARE
NO.	SYMBOL	NATURAL GAS LDC NAME	PERIOD		BOOK EQUITY (r) =		(\$/SHARE)	(MILLIONS)	GROWTH
140.	OTWIDOL	TW COUNTY OF OF DEPO TW COME	1 ERIOD	10(110 (b) X	BOOKEQUIT (I)	OROWIII (g)	(ψ/ΟΓΙ/ΤΙΤΕ)	(WILLIOTO)	OROWIII
1	GAS	NICOR, INC.	2002	0.3611	17.50%	6.32%	16.55	44.01	
2			2003	0.1185	12.30%	1.46%	17.13	44.04	
3			2004	0.1622	13.10%	2.12%	16.99	44.10	
4			2005	0.1878	12.50%	2.35%	18.36	44.18	
5			2006	0.3861	14.00%	<u>5.41%</u>	<u>19.35</u>	<u>44.70</u>	
6			GROWTH 2002 - 2006	6		3.53%	1.50%		0.39%
7			2007	0.2963	13.00%	3.85%		44.60	-0.22%
8			2008	0.3091	13.00%	4.02%		44.70	0.00%
9			2010-12	0.3103	12.00%	3.72%	4.50%	45.00	0.13%
10									
11	NWN	NORTHWEST NATURAL GAS CO.	2002	0.2222	8.50%	1.89%	18.88	25.59	
12			2003	0.2784	9.00%	2.51%	19.52	25.94	
13			2004	0.3011	8.90%	2.68%	20.64	27.55	
14			2005	0.3744	9.90%	3.71%	21.28	27.58	
15			2006	0.3930	10.60%	4.17%	21.96	<u>27.28</u>	
16			GROWTH 2002 - 2006		40.700/	2.99%	3.50%	0= =0	1.61%
17			2007	0.4000	10.50%	4.20%		27.50	0.81%
18			2008	0.4118	11.00%	4.53%	0.700/	27.50	0.40%
19			2010-12	0.3898	12.00%	4.68%	3.50%	29.00	1.23%
20 21	PNY	PIEDMONT NATURAL GAS COMPANY	2002	0.1579	10.600/	4 670/	0.04	66.10	
	PINT	PIEDWONT NATURAL GAS COMPANT	2002		10.60%	1.67%	8.91	66.18	
22 23			2003	0.2613 0.3307	11.80% 11.10%	3.08% 3.67%	9.36 11.15	67.31 76.67	
23 24			2004	0.3106	11.50%	3.57%	11.53	76.70	
2 <del>4</del> 25			2005	0.2520	11.00%	2.77%	11.83	74.61	
26			GROWTH 2002 - 2006		11.00%	2.95%	6.50%	<u>/4.01</u>	3.04%
27			2007	0.2929	11.50%	3.37%	0.0070	73.80	-1.09%
28			2008	0.2897	11.50%	3.33%		73.00	-1.08%
29			2010-12	0.2581	11.50%	2.97%	2.50%	71.80	-0.76%
30			2010 12	0.2001	11.5570	2.01 70	2.0070	7 1.00	0.7070
31	SJI	SOUTH JERSEY INDUSTIES, INC.	2002	0.3852	12.50%	4.82%	9.67	24.41	
32			2003	0.4307	11.60%	5.00%	11.26	26.46	
33			2004	0.4810	12.50%	6.01%	12.41	27.76	
34			2005	0.4971	12.40%	6.16%	13.50	28.98	
35			2006	0.6260	16.30%	10.20%	<u>15.12</u>	<u>29.30</u>	
36			GROWTH 2002 - 2006	6		6.44%	13.00%		4.67%
37			2007	0.6370	17.00%	10.83%		29.60	1.02%
38			2008	0.6379	17.00%	10.84%		30.00	1.19%
39			2010-12	0.6364	17.50%	11.14%	5.00%	31.00	1.13%

#### **REFERENCES:**

COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY

- RATINGS & REPORTS DATED 03/16/2007

COLUMN (C): COLUMN (A) x COLUMN (B)

COLUMN (C): LINES 6, 16 & 26, SIMPLE AVERAGE GROWTH, 2001 - 2005

COLUMN (D): VALUE LINE INVESTMENT SURVEY

COLUMN (D): LINES 6, 16 & 26, COMPOUND GROWTH RATE

COLUMN (E): VALUE LINE INVESTMENT SURVEY

COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

LINE NO.	STOCK SYMBOL								
1	SWX	SOUTHWEST GAS CORPORATION	2002	0.2931	6.50%	1.91%	17.91	33.29	
2			2003	0.2743	6.10%	1.67%	18.42	34.23	
3			2004	0.5060	8.30%	4.20%	19.18	36.79	
4			2005	0.3440	6.40%	2.20%	19.10	39.33	
5			2006	0.5859	9.00%	5.27%	<u>21.58</u>	<u>41.77</u>	
6			GROWTH 2002 - 2006			3.05%	3.00%		5.84%
7			2007	0.5943	9.50%	5.65%		43.00	2.94%
8			2008	0.6178	10.00%	6.18%		44.00	2.63%
9			2010-12	0.6538	10.00%	6.54%	4.00%	47.50	2.60%
10									
11	WGL	WGL HOLDINGS, INC.	2002	-0.1140	7.20%	NMF	15.78	48.56	
12			2003	0.4435	7.20%	3.19%	16.25	48.63	
13			2004	0.3434	11.70%	4.02%	16.95	48.67	
14			2005	0.3744	12.00%	4.49%	17.80	48.65	
15			2006	0.3093	10.20%	<u>3.15%</u>	<u>18.28</u>	<u>48.89</u>	
16			GROWTH 2002 - 2006			3.71%	3.00%		0.17%
17			2007	0.2959	10.50%	3.11%		48.91	0.04%
18			2008	0.3073	10.70%	3.29%		48.92	0.03%
19			2010-12	0.3409	10.50%	3.58%	3.00%	49.00	0.04%

REFERENCES: COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY

- RATINGS & REPORTS DATED 03/16/2007

COLUMN (C): COLUMN (A) x COLUMN (B)

COLUMN (C): LINES 6, 16 & 26, SIMPLE AVERAGE GROWTH, 2001 - 2005

#### WATER COMPANY SAMPLE:

LINE NO.	STOCK SYMBOL	(A)	(B) ZACKS EPS	EPS	(C) VALUE LINE PROJECTED DPS	BVPS	EPS	(D) VALUE LINE HISTORIC DPS	BVPS	(E) VALUE LINE & ZACKS AVGS.	EPS	(F) 5 - YEAR COMPOUND HISTORY DPS	BVPS
1	AWR	7.66%	-	10.50%	1.50%	5.00%	-2.50%	1.00%	4.50%	3.33%	-0.56%	0.85%	4.43%
2	CWT	5.86%	9.70%	4.50%	1.00%	5.00%	-4.00%	1.00%	1.50%	2.67%	11.83%	0.44%	5.40%
3	swwc	5.37%	10.00%	12.00%	9.00%	5.00%	1.50%	10.00%	14.00%	8.79%	-5.15%	9.33%	14.02%
4	WTR	7.18%	8.50%	11.00%	10.00%	7.00%	8.50%	6.50%	11.00%	8.93%	8.62%	7.46%	11.00%
5				9.50%	5.38%	5.50%	0.88%	4.63%	7.75%		3.69%	4.52%	8.71%
6	AVERAGES	6.52%	9.40%		6.79%			4.42%		5.93%		5.64%	

#### NATURAL GAS LDC SAMPLE:

		(A)	(B)		(C)			(D)		(E)		(F)	
LINE	STOCK		ZACKS		VALUE LINE PROJECTED			VALUE LINE HISTORIC		VALUE LINE &		5 - YEAR COMPOUND HISTORY	
NO.	SYMBOL	(br)+(sv)	EPS	EPS	DPS	BVPS	EPS	DPS	BVPS	ZACKS AVGS.	EPS	DPS	BVPS
1	ATG	5.98%	5.00%	3.50%	5.50%	2.50%	13.50%	2.00%	8.50%	5.79%	10.57%	8.20%	13.38%
2	ATO	5.54%	5.30%	5.00%	1.50%	4.00%	10.00%	2.00%	8.50%	5.19%	8.37%	1.65%	10.04%
3	LG	3.77%	-	2.00%	2.50%	5.00%	6.50%	0.50%	3.50%	3.33%	19.05%	1.10%	5.75%
4	NJR	6.13%	6.00%	2.50%	3.00%	8.00%	8.00%	3.50%	8.50%	5.64%	7.59%	4.66%	14.57%
5	GAS	3.71%	2.00%	4.00%	1.00%	4.50%	-3.50%	3.50%	1.50%	1.86%	1.28%	0.27%	3.99%
6	NWN	5.07%	5.30%	7.00%	4.00%	3.50%	5.00%	1.00%	3.50%	4.19%	9.04%	2.49%	3.85%
7	PNY	3.69%	5.50%	3.00%	4.00%	2.50%	5.00%	5.00%	6.50%	4.50%	7.53%	4.39%	7.34%
8	SJI	11.13%	6.50%	9.50%	5.50%	5.00%	11.50%	2.50%	13.00%	7.64%	19.16%	5.24%	11.82%
9	SWX	7.22%	-	8.00%	1.50%	4.00%	-0.50%	-	3.00%	3.20%	14.30%	-	4.77%
10	WGL	3.33%	3.00%	1.00%	1.50%	3.00%	6.00%	1.50%	3.00%	2.71%	14.22%	1.35%	3.75%
11				4.55%	3.00%	4.20%	6.15%	2.39%	5.95%		11.11%	2.93%	7.93%
12	AVERAGES	5.56%	4.83%		3.92%			4.83%		4.40%		7.32%	

#### REFERENCES:

COLUMN (A): SCHEDULE WAR - 4, PAGE 1, COLUMN C

COLUMN (B): ZACKS INVESTMENT RESEARCH (www.zacks.com)

COLUMN (C): VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS DATED 01/26/2007 (WATER COMPANIES) AND 03/16/2007 (NATURAL GAS LDC's)

COLUMN (D): VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS DATED 01/26/2007 (WATER COMPANIES) AND 03/16/2007 (NATURAL GAS LDC's)

COLUMN (E): SIMPLE AVERAGE OF COLUMNS (B) THRU (D) LINES 1, 3, 5 AND 7

COLUMN (F): 5-YEAR ANNUAL GROWTH RATE CALCULATED WITH DATA COMPILED FROM VALUE LINE INVESTMENT SURVEY

- RATINGS & REPORTS DATED 01/26/2007 (WATER COMPANIES) AND 03/09/2007 (NATURAL GAS LDC's)

#### **BASED ON A GEOMETRIC MEAN:**

LINE	STOCK						(A)									(B) EXPECTED
NO.	SYMBOL	k	=	$r_{\rm f}$	+	[	ß	х	(	$r_{\rm m}$	-	r <sub>f</sub>	)	]	=	RETURN
1	AWR	k	=	5.14%	+	[	0.80	х	(	10.40%	-	5.14%	)	]	=	9.35%
2	CWT	k	=	5.14%	+	[	0.90	x	(	10.40%	-	5.14%	)	]	=	9.87%
3	SWWC	k	=	5.14%	+	[	0.90	x	(	10.40%	-	5.14%	)	]	=	9.87%
4	WTR	k	=	5.14%	+	[	0.90	x	(	10.40%	-	5.14%	)	]	=	9.87%
5	WATER COM	IPANY .	AVEI	RAGE			0.88									9.74%
6	ATG	k	=	5.14%	+	[	0.95	x	(	10.40%	-	5.14%	)	]	=	10.14%
7	ATO	k	=	5.14%	+	[	0.80	x	(	10.40%	-	5.14%	)	]	=	9.35%
8	LG	k	=	5.14%	+	[	0.85	x	(	10.40%	-	5.14%	)	]	=	9.61%
9	NJR	k	=	5.14%	+	[	0.80	x	(	10.40%	-	5.14%	)	]	=	9.35%
10	GAS	k	=	5.14%	+	[	1.30	x	(	10.40%	-	5.14%	)	]	=	11.98%
11	NWN	k	=	5.14%	+	[	0.75	x	(	10.40%	-	5.14%	)	]	=	9.08%
12	PNY	k	=	5.14%	+	[	0.80	x	(	10.40%	-	5.14%	)	]	=	9.35%
13	SJI	k	=	5.14%	+	[	0.70	x	(	10.40%	-	5.14%	)	]	=	8.82%
14	SWX	k	=	5.14%	+	[	0.85	x	(	10.40%	-	5.14%	)	]	=	9.61%
15	WGL	k	=	5.14%	+	[	0.85	х	(	10.40%	-	5.14%	)	]	=	9.61%
16	16 NATURAL GAS LDC AVERAGE						0.87									9.69%

#### **REFERENCES:**

COLUMN (A): SHARPE LITNER CAPITAL ASSET PRICING MODEL ("CAPM") FORMULA

$$k = r_f + [ \beta (r_m - r_f) ]$$

WHERE: k = THE EXPECTED RETURN ON A GIVEN SECURITY

 $r_{\rm f}$  = RATE OF RETURN ON A RISK FREE ASSET PROXY (a)

ß = THE BETA COEFFICIENT OF A GIVEN SECURITY

 $r_m$  = PROXY FOR THE MARKET RATE OF RETURN (b)

COLUMN (B): EXPECTED RATE OF RETURN USING THE CAPM FORMULA

#### **NOTES**

- (a) A 6-WEEK AVERAGE OF THE 91-DAY T-BILL RATES THAT APPEARED IN <u>VALUE LINE INVESTMENT SURVEY'S</u>
  "SELECTION & OPINIONS" PUBLICATION FROM 02/02/2007 THROUGH 03/09/2007 WAS USED AS A RISK FREE RATOF RETURN.
- (b) THE MARKET RATE PROXY USED WAS THE GEOMETRIC MEAN FOR S&P 500 RETURNS OVER THE 1926 2005 PERIOD. THE DATA WAS OBTAINED FROM IBBOTSON ASSOCIATES' STOCKS, BONDS, BILLS AND INFLATION: 2005 YEARBOOK.

#### **BASED ON AN ARITHMETIC MEAN:**

LINE	STOCK	I.					(A)		,	_		_	\ 1		(B) EXPECTED
<u>NO.</u>	SYMBOL	k	=	r <sub>f</sub>	+	L	ß	Х	(	r <sub>m</sub>	-	r <sub>f</sub>	) ]	=	RETURN
1	AWR	k	=	5.14%	+	[	0.80	х	(	12.30%	-	5.14%	) ]	=	10.87%
2	CWT	k	=	5.14%	+	[	0.90	х	(	12.30%	-	5.14%	) ]	=	11.58%
3	SWWC	k	=	5.14%	+	[	0.90	х	(	12.30%	-	5.14%	) ]	=	11.58%
4	WTR	k	=	5.14%	+	[	0.90	х	(	12.30%	-	5.14%	) ]	=	11.58%
5	WATER COM	IPANY A	AVEF	RAGE			0.88								11.40%
6	ATG	k	=	5.14%	+	[	0.95	Х	(	12.30%	-	5.14%	) ]	=	11.94%
7	ATO	k	=	5.14%	+	[	0.80	х	(	12.30%	-	5.14%	) ]	=	10.87%
8	LG	k	=	5.14%	+	[	0.85	х	(	12.30%	-	5.14%	) ]	=	11.23%
9	NJR	k	=	5.14%	+	[	0.80	х	(	12.30%	-	5.14%	) ]	=	10.87%
10	GAS	k	=	5.14%	+	[	1.30	х	(	12.30%	-	5.14%	) ]	=	14.45%
11	NWN	k	=	5.14%	+	[	0.75	х	(	12.30%	-	5.14%	) ]	=	10.51%
12	PNY	k	=	5.14%	+	[	0.80	х	(	12.30%	-	5.14%	) ]	=	10.87%
13	SJI	k	=	5.14%	+	[	0.70	х	(	12.30%	-	5.14%	) ]	=	10.15%
14	SWX	k	=	5.14%	+	[	0.85	х	(	12.30%	-	5.14%	) ]	=	11.23%
15	WGL	k	=	5.14%	+	[	0.85	х	(	12.30%	-	5.14%	) ]	=	11.23%
16	NATURAL G	AS LDC	AVE	RAGE		Ī	0.87								11.33%

#### **REFERENCES:**

COLUMN (A): SHARPE LITNER CAPITAL ASSET PRICING MODEL ("CAPM") FORMULA

$$k = r_f + [ \beta (r_m - r_f) ]$$

WHERE: k = THE EXPECTED RETURN ON A GIVEN SECURITY

 $\rm r_f$  = RATE OF RETURN ON A RISK FREE ASSET PROXY (a)  $\rm lbeta$  = THE BETA COEFFICIENT OF A GIVEN SECURITY

 $r_{m}$  = PROXY FOR THE MARKET RATE OF RETURN (b)

COLUMN (B): EXPECTED RATE OF RETURN USING THE CAPM FORMULA

#### **NOTES**

- (a) A 6-WEEK AVERAGE OF THE 91-DAY T-BILL RATES THAT APPEARED IN <u>VALUE LINE INVESTMENT SURVEY'S</u>
  "SELECTION & OPINIONS" PUBLICATION FROM 02/02/2007 THROUGH 03/09/2007 WAS USED AS A RISK FREE RAT OF RETURN.
- (b) THE MARKET RATE PROXY USED WAS THE ARITHMETIC MEAN FOR S&P 500 RETURNS OVER THE 1926 2005 PERIOD. THE DATA WAS OBTAINED FROM IBBOTSON ASSOCIATES STOCKS, BONDS, BILLS AND INFLATION: 2005 YEARBOOK.

#### ARIZONA-AMERICAN WATER COMPANY ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS **TEST YEAR ENDED DECEMBER 31, 2005 ECONOMIC INDICATORS - 1990 TO PRESENT**

LINE		(A) CHANGE IN	(B) CHANGE IN GDP	(C) PRIME	(D) FED. DISC.	(E) FED. FUNDS	(F) 91-DAY	(G) 30-YR	(H) A-RATED UTIL. BOND	(I) Baa-RATED UTIL. BOND
NO.	YEAR	CPI	(1996 \$)	RATE	RATE	RATE	T-BILLS	T-BONDS	YIELD	YIELD
1	1990	5.40%	1.90%	10.01%	6.98%	8.10%	7.49%	7.49%	9.86%	10.06%
2	1991	4.21%	-0.20%	8.46%	5.45%	5.69%	5.38%	5.38%	9.36%	9.55%
3	1992	3.01%	3.30%	6.25%	3.25%	3.52%	3.43%	3.43%	8.69%	8.86%
4	1993	2.99%	2.70%	6.00%	3.00%	3.02%	3.00%	3.00%	7.59%	7.91%
5	1994	2.56%	4.00%	7.14%	3.60%	4.20%	4.25%	4.25%	8.31%	8.63%
6	1995	2.83%	2.50%	8.83%	5.21%	5.84%	5.49%	5.49%	7.89%	8.29%
7	1996	2.95%	3.70%	8.27%	5.02%	5.30%	5.01%	5.01%	7.75%	8.17%
8	1997	1.70%	4.50%	8.44%	5.00%	5.46%	5.06%	5.06%	7.60%	8.12%
9	1998	1.60%	4.20%	8.35%	4.92%	5.35%	4.78%	4.78%	7.04%	7.27%
10	1999	2.70%	4.50%	7.99%	4.62%	4.97%	4.64%	4.64%	7.62%	7.88%
11	2000	3.40%	3.70%	9.23%	5.73%	6.24%	5.82%	5.82%	8.24%	8.36%
12	2001	1.60%	0.80%	6.92%	3.41%	3.88%	3.38%	5.95%	7.59%	8.02%
13	2002	2.40%	1.60%	4.67%	1.17%	1.66%	1.60%	5.38%	7.41%	7.98%
14	2003	1.90%	2.50%	4.12%	2.03%	1.13%	1.01%	4.92%	6.18%	6.64%
15	2004	3.30%	3.90%	4.34%	2.35%	1.35%	1.37%	5.03%	5.77%	6.20%
16	2005	3.40%	3.10%	6.16%	4.16%	3.16%	3.17%	4.57%	5.38%	5.78%
17	2006	2.50%	3.10%	7.97%	5.97%	4.97%	4.83%	4.88%	5.94%	6.30%
18	CURRENT	2.50%	2.20% (a)	8.25%	6.25%	5.25%	5.12%	4.68%	5.65%	5.89%

#### REFERENCES:

COLUMN (A): 1990 - CURRENT, U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS WEB SITE

COLUMN (B): 1990 - CURRENT, U.S. DEPARTMENT OF COMMERCE, BUREAU OF ECONOMIC ANALYSIS WEB SITE

COLUMN (C) THROUGH (G): 1990 - 2003, FEDERAL RESERVE BANK OF ST. LOUIS WEB SITE

COLUMN (C) THROUGH (F): CURRENT, <u>THE VALUE LINE INVESTMENT SURVEY</u>, DATED 03/09/2007 COLUMN (G) THROUGH (I): CURRENT, <u>THE VALUE LINE INVESTMENT SURVEY</u>, DATED 03/09/2007

COLUMN (H) THROUGH (J): 1990 - 2000, MOODY'S PUBLIC UTILITY REPORTS

COLUMN (H) THROUGH (I): 2001, MERGENT 2002 PUBLIC UTILITY MANUAL

COLUMN (H) THROUGH (I): 2003 MERGENT NEWS REPORTS

(a) REVISED FOURTH QUARTER 2006

#### AVERAGE CAPITAL STRUCTURES OF SAMPLE WATER COMPANIES

LINE									WATER COMPANY			
NO.		P	AWR	PCT.	CWT	PCT. S	WWC	PCT.	WTR	PCT. AVI	ERAGE	PCT.
1	DEBT	\$	268.4	50.4% \$	274.1	48.0% \$	117.6	44.7% \$	878.4	52.0% \$	384.6	50.3%
3	PREFERRED STOCK		0.0	0.0%	3.5	0.6%	0.5	0.2%	0.0	0.0%	1.0	0.1%
5	COMMON EQUITY		264.1	49.6%	293.9	51.4%	144.8	55.1%	811.9	48.0%	378.7	49.5%
6 7	TOTALS	\$	532.5	100% \$	571.5	100% \$	262.9	100% \$	1,690.3	100% \$	764.3	100%

#### AVERAGE CAPITAL STRUCTURES OF SAMPLE NATURAL GAS COMPANIES

NO.												
1			ATG	PCT.	ATO	PCT.	LG	PCT.	NJR	PCT.	GAS	PCT.
2												
3	DEBT	\$	1,615.0	51.9%	\$ 1,602.4	42.3% \$	340.5	48.1% \$	317.2	42.0% \$	1,071.8	56.9%
4												
5	PREFERRED STOCK		0.0	0.0%	0.0	0.0%	0.9	0.1%	0.0	0.0%	0.6	0.0%
6												
7	COMMON EQUITY		1,499.0	48.1%	2,183.1	57.7%	366.5	51.8%	438.1	58.0%	811.3	43.1%
8												
9	TOTALS	\$	3,114.0	100%	\$ 3,785.5	100% \$	707.9	100% \$	755.3	100% \$	1,883.7	100%
10												
11 12			N IVA/N I	рот	PNY	DOT	SJI	рот	CIAIV	рот	WOL	рот
13			NWN	PCT.	PINT	PCT.	201	PCT.	SWX	PCT.	WGL	PCT.
14	DEBT	\$	521.5	47.0%	\$ 625.0	41.4% \$	328.9	48.7% \$	1,224.9	59.0% \$	584.2	38.8%
15	DEBT	Ψ	321.3	47.076	φ 025.0	41.470 Ø	320.9	40.776 ¢	1,224.5	39.076 4	5 304.2	30.076
16	PREFERRED STOCK		0.0	0.0%	0.0	0.0%	1.6	0.2%	100.0	4.8%	28.2	1.9%
17	THE ENTED OF CON		0.0	0.070	0.0	0.070	1.0	0.270	100.0	1.070	20.2	1.070
18	COMMON EQUITY		586.9	53.0%	884.2	58.6%	344.4	51.0%	751.1	36.2%	894.0	59.3%
19			100.0	22.070							230	
20	TOTALS	\$	1,108.4	100%	\$ 1,509.2	100% \$	674.9	100% \$	2,076.0	100%	\$1,506.4	100%
21			,			•		•	,			

LINE

22				
23		N.	ATURAL G	AS LDC
24		A۱	/ERAGE	PCT.
25				
26	DEBT	\$	823.1	48.1%
27				
28	PREFERRED STOCK		13.1	0.8%
29				
30	COMMON EQUITY		875.9	51.29
31				
32	TOTALS	\$	1.712.1	1009

MOST RECENT SEC 10-K FILINGS OR ANNUAL REPORTS